COMMENTS AND ENFORCEMENT STAFF RESPONSES
Cleanup and Abatement Order No. R3-2023-Proposed
Former SEMCO Twist Drill & Tool Company

The Central Coast Water Board received comments from:

- Chris Mathys, Rhine, LP (Discharger)
- City of Santa Maria (Discharger)
- County of Santa Barbara (Discharger)
- Geosyntec Consultants (on behalf of County of Santa Barbara, Discharger)
- Santa Maria Public Airport District (Discharger)
- Roux Associates, Inc. (on behalf of Santa Maria Public Airport District, Discharger)
- Fernando Salas (Discharger)

Staff responses to comments on Cleanup and Abatement Order No. R3-2023-Proposed (Proposed Order)[1] are provided below. All comments are provided as direct transcriptions from the letters containing them. Transcriptions do not include the entire content of the comment letter as some content is non-substantive (e.g., salutations or contact information) or is supplementary information (e.g., attachments to letters).[2]

Chris Mathys, Rhine, LP – 1

The herein referenced Site has a long history of various dischargers including the U.S. Government operating as the Santa Maria Army Airfield, the Army Corp of Engineers, the Santa Maria Public Airport District and Henry, Rhea and other members of the Stafford Family doing business as SEMCO, Twist and Drill. (SEMCO) [sic] All of these dischargers contributed to the contamination which currently exists on the subject parcels as specified in the draft of the Abatement Order.

Staff Response to Comment Chris Mathys, Rhine LP – 1
In response to the suggestion that there are other dischargers who could have contributed to Site contamination, we note that State Water Resources Control Board (State Water Board) precedent and California law establish that responsibility for cleanup is joint and several; identification of other dischargers is not a release of liability.[3]

[1] The Proposed Order is available on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=zjuf5
[2] Comment letters submitted in response to the Proposed Order are available on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=dz2qn
[3] The State Water Board has consistently found that liability under the Water Code is joint and several. (*In the Matter of the Petition of James Salvatore* (State Water Board Order WQ 2013-0109), at p. 19; see also *In the Matter of the Petition of Union Oil Company* (State Water Board Order WQ 90-2), at p. 8.) The Water Boards also have a longstanding policy against apportioning or allocating responsibility in cleanup and abatement orders. (See State Water Board Order WQ 89-12 (*San Diego Unified Port District*).)

The Proposed Order currently names only those persons for which there is sufficient evidence of responsibility; there is insufficient evidence to name additional persons (e.g., United States Government) at this time. However, any person's exclusion from the Proposed Order does not prevent the Central Coast Water Board from naming additional dischargers in future investigations and/or cleanup requirements.

Nothing in the Proposed Order precludes the named dischargers from pursuing contribution using other legal avenues.

The results of the investigation and cleanup required by the Proposed Order may or may not support the inclusion of additional dischargers in future investigation and/or cleanup requirements. The Central Coast Water Board will carefully review the data, findings, conclusions, and recommendations that result from the Proposed Order's investigation. If the Board determines that additional dischargers should be included in subsequent investigation or cleanup requirements, the Proposed Order provides flexibility to add additional dischargers. (See Proposed Order, Section E.3.)

Consistent with State Water Board Resolution No. 92-49,[4] issuance of the Proposed Order should not be delayed, given the known impacts and urgent need to protect and remediate groundwater drinking water supplies.

Change made: No changes were made to the Proposed Order in response to this comment.

Chris Mathys, Rhine, LP – 2

During the time of the SEMCO ownership, Heidi Mathys, now deceased extended credit to SEMCO for the purpose of equipment upgrades. The loan ended up in default and the property reverted to Heidi Mathys and was subsequently transferred to Rhine LP. Rhine LP., Oro Financial of Ca. Inc. and Chris Mathys. [sic] Neither of these individuals or entities were ever dischargers and have never conducted business at the subject property.

Staff Response to Comment Chris Mathys, Rhine, LP – 2

Water Code section 13304 authorizes the Central Coast Water Board to require any person that has "caused or permitted" waste to be discharged where it is, or probably will be, discharged into waters of the state and creates, or threatens to create, a condition of pollution or nuisance, to clean up the waste, abate effects of the waste, or take other necessary remedial action. The key question in assigning responsibility for the cleanup and abatement of waste is whether the discharger caused or permitted the discharge.

[4] State Water Board Resolution 92-49 is available at: https://www.waterboards.ca.gov/water_issues/programs/site_cleanup_program/resolution_92_49.html

Current landowners, such as Rhine LP, are responsible for cleanup, regardless of whether the landowner owned the property at the time of the initial release. (*Tesoro Refining & Marketing Co. v. Los Angeles Regional Water Quality Control Board*, 42 Cal. App. 5th 453, 472 (2019); *In the Matter of the Petition of Schmidl* (State Board Order WQ 89-1); *In the Matter of the Petition of Zoecon Corp.* (State Water Board Order No. WQ 86-02); *In the Matter of the Petition of Vallco Park, Ltd.* (State Water Board Order No. WQ 86-18).

Similarly, former landowners may be responsible for cleanup, even if their ownership began after the time of the initial release. (*In the Matter of the Petition of Alcoa* (State Water Board Order WQ 93-9); *In the Matter of the County of San Diego* (State Water Board Order WQ 96-2)). Such former landowners are responsible when they had knowledge or should have had knowledge of the discharge or activities that caused the discharge and had the legal ability to control the discharge.

Former landowners, Oro Financial of California, Inc. and Chris Mathys, knew of the waste discharges at the Site during and/or before their ownership. By the time Oro Financial of California, Inc. acquired ownership of the Site, the discharges of waste and condition of pollution or nuisance at the Site were well documented as evidenced by the multiple regulatory orders in place. In November 2002, Mr. Mathys, on behalf of Oro Financial of California, Inc., submitted a signed Acknowledgement of Willingness to Participate in Cleanup or Abatement Cost Recovery Program form, demonstrating his knowledge of waste discharges. Furthermore, Oro Financial of California, Inc. and Chris Mathys had the legal ability to control the discharge and failed to do so. During the timeframe in which these persons/entities owned the Site, they were ordered to perform Site investigation and failed to comply with those directives. It is appropriate to name these former landowners as dischargers in the Proposed Order.

Change Made: No changes were made to the Proposed Order in response to this comment.

Chris Mathys, Rhine, LP– 3

The Central Coast Regional Water Control Board [sic] has known about the contamination affecting this site for approx. 25 years and has had an open case with SEMCO since 1980 and is very familiar with the contamination related to this property. SEMCO conducted and submitted extensive testing results and reports while they were in possession of the property. The water board [sic] has a long history of requesting remediation work including the installation of a water filtration system which was installed by a “Discharger” Rhea Stafford. The property changed ownership over 20 years ago and only since 2022 has the water board commenced enforcement action against Rhine LP., Chris Mathys and Oro Financial of Ca. Inc., all of which have never been dischargers.

Staff Response to Comment Chris Mathys, Rhine, LP – 3
The Central Coast Water Board has known about the discharges at the Site since 1985 and has made numerous attempts since then to get the Site remediated. As reflected in the record (see GeoTracker),[5] several investigations and cleanup actions have been conducted since pollution was first identified. The Central Coast Water Board has previously issued Cleanup and Abatement Order (CAO) No. 87-188, CAO No. 89-70, and CAO No. 90-88, which was amended in 1991 and 1994. Continued investigation and cleanup actions are needed to protect and restore water quality and beneficial uses of waters of the state. See Staff Response to Comment Chris Mathys, Rhine, LP – 2 (discussing Rhine LP's, Chris Mathys' and Oro Financial of California, Inc.'s status as dischargers).
Change Made: No changes were made to the Proposed Order in response to this comment.

Chris Mathys, Rhine, LP – 4

According to a letter from the California Water Boards [sic] dated July 28, 2022, a threat to human health exists related to water quality and immediate action is required despite the fact the water board began enforcement with the "discharger", [sic] SEMCO over 30 years ago and Rhine LP has only been subject to enforcement action over the last 3 years.

Staff Response to Comment Chris Mathys, Rhine, LP – 4
Despite numerous attempts to work cooperatively with dischargers and issuance of previous investigative orders—requiring the delineation of the lateral and vertical extent of volatile organic compounds (VOCs)[6] and other contaminants in soil, soil gas, and groundwater originating from the Site—the full extent of contamination is undetermined. The Proposed Order is needed because the dischargers named in previous orders have neither delineated nor evaluated remedial actions to fully investigate and cleanup the entire extent of waste discharges from the Site. Central Coast Water Board staff acknowledge that the Site has been contaminated for many years. Due to the continued risk to drinking water supplies and the lack of progress being made to address the waste discharges, Central Coast Water Board staff are implementing the region's established regulatory process for site by recommending the issuance of the Proposed Order. The length of time the Central Coast Water Board has overseen Site cleanup does not negate the need for the Proposed Order. Additionally, see Staff Response to Comment Chris Mathys, Rhine, LP – 3.

[5] GeoTracker website for SEMCO: http://geotracker.waterboards.ca.gov/?gid=SLT3S2411351

[6] VOCs detected in groundwater, soil, and/or soil gas beneath the Site are chlorinated solvents used as degreasers for tools and metal parts. These chlorinated VOCs include tetrachloroethylene (PCE), trichloroethylene (TCE), 1,1,1-trichloroethane (TCA), cis-1,2-dichloroethene (cis-1,2-DCE), 1,1-dichloroethene (1,1-DCE), 1,2-dichloroethane (1,2-DCA), and 1,1-dichloroethane (1,1-DCA).

Change Made: No changes were made to the Proposed Order in response to this comment.

Chris Mathys, Rhine, LP– 5

Since the enforcement began, although Rhine LP. Is not the “discharger”, Rhine has been subjected to intense legal action by water board [sic] staff which included thousands of dollars of costs and fees Rhine incurred including attorney’s fees of $25,000 a fine of $126,000.00, and $129,796.00 in testing costs totaling $255,796.00. Rhine LP. Under protest has completed the following tasks since the enforcement began and has paid the following fines and expenses: Payment of $126,000.00 the Central Coast Regional water [sic] Quality Control Board; Payment to Analytical Consulting Group for air sampling - $24,396.00. Analytical Consulting Group (AGC) [sic] conducted extensive air-sampling in and around the subject property to insure the current tenant is safe and their employees are not subject to health hazards related to work performed by the “dischargers.”, The results were negative, and it was determined the current occupant is not subject to any health risks. Payment to Analytical Consulting Group for sub surface soil sampling - $105,400.00. AGC [sic] compiled a site assessment work plan and conducted groundwater sampling including subsurface soil sampling, grab sampling and the determination of extent of TCE plume. Total expenses paid by Rhine LP: $255,796.00.

Staff Response to Comment Chris Mathys, Rhine, LP – 5
Rhine L.P. is a discharger. See Staff Response to Comment Chris Mathys, Rhine, LP – 2 We acknowledge that the commenter may have incurred costs associated with their partial compliance with previous Central Coast Water Board directives. Because the commenter has not fully complied with previous directives, the additional investigation and cleanup requirements in the Proposed Order must move forward. We cannot provide dischargers with legal advice regarding recovery of past costs. It is misleading to characterize the results of the indoor air sampling investigation as “negative” because VOC concentrations were detected in indoor air during both of the indoor air sampling investigations in 2021 and 2022. All the detected VOC concentrations were below commercial ESLs,[7] indicating that there is no immediate

[7] Information on ESLs is available at: https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html

vapor intrusion human health risk to the tenants. However, additional sampling will likely be required in future investigations as explained in Staff Response to Comment Geosyntec Consultants – 1.
Change Made: No changes were made to the Proposed Order in response to this comment.

Chris Mathys, Rhine, LP – 6

In addition Rhine LP, as directed by the California Water Boards [sic] has submitted an application with on [sic] the Site Cleanup Subaccount Program [sic] to seek funding to continue the remediation and still has not received an update.

In the interest of keeping the cleanup process active, Rhine LP, without assuming any liability and under protest has engaged a new environmental consultant, Scientist Elliott Haro with Haro Environmental to estimate the cost of the following scope of work:

1. Identify and document existing groundwater monitoring wells and related equipment on the subject property.

2. Prepare and submit a work plan to the Central Coast Regional water [sic] Quality Control Board and amend as required based on their review prior to commencement of remediation work.

3. Work plan to include scope of work to assess the current condition of the onsite groundwater extraction and treatment system including the condition of the ground water extraction wells and determine if the system is operable.

4. Furnish and install deep monitoring wells has [sic] necessary to delineate the lateral and vertical extent of wastes in groundwater.

5. Obtain any permits required to furnish and install monitoring wells in the deep water-bearing zone (approx. 220-250 feet bgs)

6. Identify which borings will be continuously cored or otherwise logged to evaluate site lithology and determine the depth of first encountered shallow groundwater.

7. Provide sampling method and procedures for collecting groundwater samples from existing, restored and new groundwater monitoring wells.

8. Specify the USEPA or other analytical methods and quality control and quality assurance procedures to analyze groundwater for VOCs, petroleum hydrocarbons, semi-volatile organic compounds and dissolved and total metals.

9. Collect additional soil gas samples to evaluate potential vapor intrusion risk from VOCs and petroleum hydrocarbon within and underneath the current buildings on site.

10. Upon completion of testing, work to include the submittal of copies of test results, a site investigation report, completion report and related reports as required and specified to the Central Coast Regional Water Quality Control Board.

11. The completion report must include well completion logs, location of borings, soil gas sampling location, description of soil, [soil] gas and ground water sampling results, and updated map with exact location of all wells.

12. Submit a Feasibility Study and Remedial Action Plan to clean-up wastes in soil, soil gas and groundwater.

The herein referenced scope of work is subject to estimates, receiving funding, weather conditions and availability of well drilling equipment.

We will contact the Central Coast Regional Water Quality Control Board as we receive updates.

Staff Response to Comment Chris Mathys, Rhine, LP – 6
The proposed scope of work recommends an iterative approach to Site investigation and remediation and generally meets the intent and requirements identified in the Proposed Order. However, the scope of work, which is based on an open-ended and undefined time schedule, is contingent on the receipt of State Water Resources Control Board Site Cleanup Subaccount Program (SCAP) funding. Regardless of whether a discharger receives discretionary funding, Site cleanup must proceed. Based on Mr. Mathys' previous actions or inactions, Central Coast Water Board staff are concerned that Mr. Mathys will fail to take the necessary steps to complete the process to receive funding. Even if discretionary funding was awarded, Central Coast Water Board staff are not confident that the necessary Site investigation (and subsequent remediation) would be performed in a reasonable timeframe. All of Mr. Mathys' previous attempts to receive discretionary funding for Site cleanup have been unsuccessful. First, in 2017, Mr. Mathys' SCAP application was denied because neither a scope of work nor a cost estimate was submitted with the application. SCAP staff attempted to reach Chris Mathys and his consultant after receiving the incomplete application, but received no response.[8] Second, in 2022, Chris Mathys, on behalf of one of the Site tenants (Santa Maria BBQ Outfitters LP), applied for Small Community Funding through the Division of Financial Assistance; the application was denied because the Site does not meet the criteria for an emergency drinking water supply threat (Supply Well 2AS was shut down in 1985).[9]

[8] 2017 SCAP funding status is available on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=l1d2v

[9] May 5, 2022, Small Community Funding application denied on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=efz1y; Central Coast Water Board comments on why the Small Community Funding application was denied, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=c5kau

On May 9, 2022, Chris Mathys applied for SCAP funding a second time and was not approved.[10] Last, on June 1, 2023, Chris Mathys, on behalf of Rhine, LP, submitted a SCAP application for the Site. A final determination on the application will be made in Spring 2024 for funding in 2024/2025. Central Coast Water Board staff do not agree with the dischargers' open-ended and undefined time schedule because of the dischargers' delays in Site investigation from 2015 to 2021 and history of noncompliance with previous Central Coast Water Board directives. Central Coast Water Board staff do not have reason to believe that the necessary Site investigation (and subsequent remediation) will be performed in a reasonable timeframe. Central Coast Water Board staff decline to revise the time schedule order (Exhibit 4) in the Proposed Order in response to this comment.
Change Made: No changes were made to the Proposed Order in response to this comment.

City of Santa Maria – 1

The City of Santa Maria ("CITY") respectfully objects to the proposed draft Cleanup and Abatement Order (CAO), naming the CITY as a discharger and potentially responsible party as follows. As an additional matter, the CITY joins and incorporates into its response by this reference the objections of the County of Santa Barbara ("COUNTY") and Santa Maria Airport District ("DISTRICT") as set forth in their responses to the draft CAO.

Staff Response to Comment City of Santa Maria – 1
The City of Santa Maria's (City's) objections are noted for the record.
Change Made: No changes were made to the Proposed Order in response to this comment.

City of Santa Maria – 2

BACKGROUND:

The CITY and COUNTY received ownership of the Santa Maria Airport (including the subject parcels) from the United States Government ("ARMY") in 1949, each with a one-half ownership interest. The COUNTY and CITY both quit claimed their respective interests in the property to the DISTRICT in 1964.

In 1984, the CITY notified the COUNTY that chemicals had been detected in its Well 2AS, which had previously been utilized by the ARMY prior to 1949. In May of 1985, the

[10] Refer to State Water Resources Control Board Resolution No. 2023-0011: https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2023/rs2023-0011.pdf

CITY shut down Well 2AS. The COUNTY issued a notice of violation ("NOV") to SEMCO as a discharger in 1985. No notice of violation was issued to the CITY as a purported discharger. Other NOVs were issued and not one named the CITY as a discharger.

On September 25, 1987, the Central Coast Water Board ("BOARD") issued CAO No. 87-188 ordering SEMCO to investigate and cleanup the degraded soil and groundwater beneath the Site. No CAO was issued to the CITY, COUNTY or DISTRICT as alleged dischargers. The BOARD issued further CAOs to SEMCO and the property owner at the time (Stafford Trust, hereinafter "TRUST") in 1990, 1991 and 1994. No CAOs were issued to the CITY at any time.

Pursuant to the multiple CAOs issued in the 1990s, the responsible parties, SEMCO and TRUST constructed a remediation system. In 1994, the Department of Toxic Substances Control (DTSC) was so concerned regarding the site that it issued an Imminent and Substantial Endangerment Determination and placed the Site on its Hazardous Waste and Substances Site List. The DTSC returned the site to the BOARD without further action by November of 1994. No allegation that the CITY was a discharger was issued by the DTSC. From 1994-2000, the remediation system was operated. In 2003, the BOARD issued a Water Code section 13267 order (2003 Order) to the new owner of the site, who had discontinued the operation of the remediation system. The CITY was not named as a responsible party or discharger in the 2003 Order.

Twelve years later, in 2015, the BOARD issued a Water Code section 13267 order (2015 Order), despite no action of remediation being performed for all that time, and despite the 1994 Imminent and Substantial Endangerment determination. The 2015 Order does not allege the CITY was a discharger or was a responsible party.
In September 2021, the Central Coast Water Board issued Administrative Civil Liability (ACL) Complaint No. R3-2021-0097 for violations of the 2015 Order, which resulted in the imposition of administrative civil liability. As a result of this complaint, a settlement was entered into with the discharger, CHRIS MATHYS (et al), for the ACL Complaint. The CITY was not named as a discharger in the complaint or settlement.

While the MATHYS Complaint was pending and settlement discussions were ongoing, the BOARD advised the CITY, COUNTY and DISTRICT that each is now (for the first time) potentially to be named a discharger and that their taxpayers are joint and severally liable for all cleanup at the site. Discussions with BOARD staff to prevent the issuance of a CAO were undertaken to no avail. This proposed CAO was then issued.

Staff Response to Comment City of Santa Maria – 2
The comment confirms that the Proposed Order correctly names the City as a discharger.

Central Coast Water Board staff disagrees with the City's implication that the City cannot or should not be named in the Proposed Order because it was not named in previous orders directing Site investigation and/or cleanup.

Consistent with State Water Board Resolution No. 92-49, Central Coast Water Board staff have made a reasonable effort to identify all dischargers associated with the unauthorized discharges of waste at the Site. Not naming dischargers in past orders or directives does not preclude the Central Coast Water Board from doing so now. (See Resolution No. 92-49 ["It is not necessary to identify all dischargers for the Regional Water Board to proceed with requirements for a discharger to investigate and clean up."].)

Change Made: No changes were made to the Proposed Order in response to this comment.

City of Santa Maria– 3

As stated in the proposed CAO, the alleged basis for liability of the CITY, COUNTY and DISTRICT is as follows:
"County of Santa Barbara, City of Santa Maria, and Santa Maria Public Airport District, are dischargers because they were aware of the activities that resulted in the discharges of waste and, as lessors of the Site, had the ability to control those discharges."

The BOARD provides no documentation of such control or evidence that any discharge occurred between 1949 and 1964.

There is no lease or other documentation in the record that provides support for the allegations.

There is no evidence that between 1949 and 1964 any discharge of any chemical took place. The only evidence of an actual spill is the CITY's inspection report (7/2/85) wherein the CITY advised that possible leakage had taken place. The BOARD also contends, in footnote 26, that a spill actually occurred in 1973, nine years after the CITY had relinquished ownership of the site. There is no evidence provided in the draft CAO that at any time from 1949 to 1964 that any contaminant was leaked. The BOARD does acknowledge that the chemicals were utilized by SEMCO for 37 years after the CITY relinquished its ownership of the site.

Staff Response to Comment City of Santa Maria – 3

The City admits that it and the County owned the Site from 1949 through 1964. (See Staff Response to Comment City of Santa Maria – 2.) During that time, the City and County had legal control over the property—ultimate responsibility of the condition of land lies with the landowners.

It is unclear whether the City is alleging that SEMCO did not operate at the Site from 1949 through 1964 or whether SEMCO's operations during that time did not result in discharges of waste. If the former, SEMCO's operations at the Site during that time is well-documented in news articles from the Santa Maria Times[11,12,13,14,15,16,17] and in Central Coast Water Board documents.[18] If the latter, evidence supports the contention that SEMCO's operations between 1949 and 1964 resulted in discharges of waste at the Site.

In accordance with State Water Board Resolution No. 92-49, the Central Coast Water Board shall use any relevant evidence, whether direct or circumstantial, in determining whether a person shall be named in a Cleanup and Abatement Order pursuant to Water Code section 13304. Relevant evidence includes, in part, the following: Documentation of historical or current activities, waste characteristics, chemical use, storage or disposal information; Industry-wide operational practices that historically have led to discharges; Evidence of poor management of materials or wastes, such as improper storage practices or inability to reconcile inventories; Physical evidence, such as analytical data, soil or pavement staining, distressed vegetation, or unusual odor or appearance; Lack of documentation of responsible management of materials or wastes, such as lack of manifests or lack of documentation of proper disposal; and Refusal or failure to respond to Central Coast Water Board inquiries. Central Coast Water Board

[11] July 22, 1955, Santa Maria Times, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=hbko5
[12] April 11, 1968, Santa Maria Times, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=wgd07
[13] November 15, 1957, Santa Maria Times, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=dxfaq
[14] November 22, 1968, Santa Maria Times, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=3qjjh
[15] March 20, 1954, Santa Maria Times, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=vfl39
[16] April 24, 1968, Santa Maria Times, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=f4d0m
[17] October 17, 1967, Santa Maria Times, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=trgrg
[18] Articles of Incorporation for S.E.M. Company, Inc., dated July 25, 1949, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=l6177

documents,[19,20,21,22,23,24,25, 26, 27,28] and documents obtained from SEMCO,[29] indicate that SEMCO used TCE as a degreaser between 1949 through 1964. (See also *Evaluation of United Artists Theatre Circuit, Inc. v. California Regional Water Quality Control Bd. (2019) 42 Cal.App.5th 851* (hereafter "Attachment 1"), incorporated herein by reference, [discussing the ubiquitous use of TCE as a degreaser at industrial and metal fabrication facilities during this time]). By the mid-1950s, SEMCO had grown to the world's largest manufacturer of threaded shank integral drills (used on metal in industrial processes).[30] By the 1960s, SEMCO was entering the international market and the threaded shank drill had been "so successful that competitors have dropped comparable items from their lines leaving SEMCO as the sole manufacture[r] of that type of tool."[31] Given the size and productivity of SEMCO's operations from 1949 to 1964, as a practical matter, there was no other economically viable alternative for a degreaser than TCE. The City and the other commenters cannot point to any other industrial degreaser that would have been used by SEMCO before 1984, when SEMCO stopped using TCE and began using 1,1,1-trichloroethane (TCA).

Discharges and/or threatened discharges of wastes have occurred on the Site since 1949 considering SEMCO's use and improper storage and/or disposal of TCE at the Site. History has shown that the largest sources of TCE in groundwater are releases from "improper disposal practices, and leaking storage tanks and pipelines"[32] and the most common causes of storage tank releases are "holes from corrosion, failure of

[19] Central Coast Water Board Internal Memo dated August 27, 1985, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=k3xh5
[20] Central Coast Water Board Internal Memo dated September 25, 1987, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=kxkrc
[21] Central Coast Water Board letter dated March 1, 1989, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=m6bn3
[22] Central Coast Water Board Briefing dated July 3, 1989, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=vg8c2
[23] Central Coast Water Board Complaint No. 89-05 dated September 22, 1989, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=qfmll
[24] Central Coast Water Board October 13, 1989, Hearing Agenda on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=tuqaz
[25] Central Coast Water Board News Release dated November 6, 1989, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=c7o34
[26] Centra Coast Water Board Meeting Item 7 – Amendment of CAO NO. 90-88 dated September 13, 1991, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=c3ndy
[27] Central Coast Water Board Staff Report dated July 9, 1993, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=g8wdc
[28] DTSC supporting documentation for Imminent and Substantial Endangerment Determination dated June 13, 1994, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=0eebp
[29]Letter Report of Subsurface Soil Investigation dated April 1, 1988, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=763ds
[30] November 15, 1957, Santa Maria Times, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=dxfaq
[31] October 17, 1967, Santa Maria Times, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=trgrg
[32] State Water Resources Control Board Division of Water Quality Groundwater Information Sheet on TCE, revised November 2017: https://www.waterboards.ca.gov/gama/docs/coc_tce.pdf

piping systems, and spills and overfills, as well as equipment failure and human operational error."[33]

SEMCO stored TCE in an above-ground storage tank (AST) connected by underground piping to the point of use in the adjacent building. The AST was either filled with purchased TCE and later 1,1,1-TCA by hand (dumping or pouring from drums) or by hose; all evidence in the record shows there was no secondary containment of the AST[34] to protect the ground surface from tank corrosion or spills and overfills, causing the stained soil surrounding the AST[35, 36] to the east of the SEMCO building. According to documents submitted by SEMCO,[37] the maintenance manager would "dispose (or remove)" TCE from SEMCO's metal parts cleaning tanks when it became too dirty to be effective (the cleaning tank is observed to be corroded with no secondary containment as shown in the investigation slides referenced in footnote 29). The dirty solvent was stored in 55-gallon drums[38] after it was "removed" from the cleaning tanks. The drums of solvent-oil sludge were stored behind the SEMCO facility building (east side of building) with no secondary containment, for six-to-twelve-month intervals until a "toxic waste hauler" would "pump all waste into his tanks and take [it] away." The maintenance manager claimed that there were no accidental or deliberate "spills" of TCE; however, documentation of stained soils (footnotes 28 and 29), and the discovery of "extremely high concentrations of [TCE] in [shallow] soils…" reported in soil sampling results near the AST,[39] are evidence that SEMCO discharged TCE in this area over a significant period. Additionally, a March 7, 1986, County of Santa Barbara complaint investigation[40] documents SEMCO employees stating that they dumped black sludge (cutting oil-soaked metal fines) into the trash (refuse bins) and that this was their normal procedure for disposing of these wastes. Additionally, County of Santa Barbara documentation

[33] USEPA Source Water Protection Practices Bulletin – Managing Above Ground Storage Tanks to Prevent Contamination of Drinking Water dated August 2010: https://archive.epa.gov/region02/capp/web/pdf/fs_swpp_ast.pdf

[34] County of Santa Barbara Hazardous Materials Management Program Memo dated January 9, 1991, documents no secondary containment for the 1,000-gallon solvent AST and the 7,000-gallon cutting oil tank, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=t7p6c

[35] The stained soil surrounding the AST was documented and sampled in 1987 and referenced in CAO NO. 87-188 on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=f2rh5

[36] July 1987 CCWB Site Investigation Slides on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=w7wfe

[37] October 10, 1988, Letter from SEMCO's maintenance manager (included in the October 13, 1989, Board Hearing agenda Items) on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=tuqaz

[38] A 1991 County of Santa Barbara Inspection Report (backside of the building) notes that hazardous waste containers are not labeled, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=2cy5p

[39] Central Coast Water Board letter dated March 28, 1988, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=0m47t

[40] Santa Barbara County (CUPA) files – Special Investigation Record: Hazardous Materials, dated March 7, 1986, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=n0ulj

cites above ground releases of metal working fluid (oil)[41] and leaking oil from blower units, located in the back of SEMCO's building (east side) discharging to soil.[42]

Since at least 1987, when the Central Coast Water Board issued Cleanup and Abatement Order No. 87-188, SEMCO reluctantly and ultimately failed to provide purchase and disposal records for solvents before 1981 despite requests from the Central Coast Water Board; suggesting the records do not exist or were improperly maintained. In 1988, after multiple attempts and under the threat of further formal enforcement, SEMCO provided records of chemicals purchased and disposed of from May 1981 to December 1987. Between May 1981 and December 1984, SEMCO purchased 6,718 gallons of TCE and disposed of only 2,475 gallons of waste oil (with solvent) offsite. In less than three years, SEMCO had no offsite accountability for over 4,000 gallons of TCE.[43] The record shows that SEMCO used and disposed of TCE in the same manner from its foundation until at least late 1984 when the facility transferred to TCA.

Additionally, the environmental consultants performing preliminary Site investigations concluded that TCE was likely discharged at the Site decades before investigations began in the mid-1980s.[44] The environmental consultants based their conclusion on the analytical data reviewed at the time and the presence of TCE biodegradation products,[45] which can take long periods of time to break down from TCE in the subsurface.

[41] County of Santa Barbara letter dated December 7, 1992, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=6ngl5
[42] County of Santa Barbara Inspection Report dated December 20, 1990, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=fb68w
[43] Central Coast Water Board October 13, 1989, Board Hearing Agenda on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=tuqaz; SEMCO's summary of purchases and credits for solvents and waste oil dated August 2, 1988, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=ylrsa; and SEMCO's submittal of purchase orders, invoices and receipts for solvents and waste oil dated March 31, 1988, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=dw8h9.
[44] Report of Subsurface Soil Investigation dated April 1, 1988, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=763ds
[45] TCE Biodegradation products include: trans-1,2-dichloroethene (trans-1,2-DCE), cis-1,2-dichloroethene (cis-1,2-DCE), 1,1-dichloroethene (1,1-DCE), vinyl chloride, and ethene.

Given the history of improper use and/or disposal practices at the Site, the record provides sufficient evidence that discharges and/or threatened discharges of wastes occurred at the Site between 1949 to 1964 and thereafter. For a complete discussion of general early knowledge of hydrogeology, knowledge that operations using degreasers caused groundwater contamination, and knowledge that TCE was a hazardous chemical and its ubiquitous use as a degreaser, see Attachment 1.
Change Made: No changes were made to the Proposed Order in response to this comment.

City of Santa Maria – 4

In the record, the only documentation of the procurement of the subject chemicals is found in a submission from SEMCO on 3/31/88 that identifies TCE was received between 1981 and 1987. There is no documentation in the record that the subject chemicals were purchased or utilized by SEMCO on the site from 1949 to 1964. Even the investigation notes of interviews with SEMCO employees do not provide evidence that SEMCO used TCE or TCA during 1949-1964. (See Memo Site info 25 Sept. 1987). The evidence from the SEMCO ownership continually denied any hazardous discharge and referred the BOARD, on numerous occasions, that the responsible party may have been the ARMY.

Staff Response to Comment City of Santa Maria – 4
See Staff Response to Comment City of Santa Maria – 3 See Staff Response to Comment Chris Mathys, Rhine, LP – 1
Change Made: No changes were made to the Proposed Order in response to this comment.

City of Santa Maria – 5

When MATHYS obtained title to the site, the BOARD transmitted to MATHYS a cost recovery acknowledgement form (15 Nov. 2002). The BOARD did not determine the CITY was a discharger or responsible party at that time. No evidence of the timing of any discharge of contaminates is identified in the file after 1990 and none shows a date prior to 1981. MATHYS acknowledged responsibility and agreed to participate in the cleanup of the site. Thereafter, from 2002 to present, no remediation has taken place. Ultimately, MATHYS was fined for failure to comply with the 2015 Order in 2021.

Staff Response to Comment City of Santa Maria – 5
See Staff Response to Comment City of Santa Maria – 2 and 3

Most of the cleanup sites that the Central Coast Water Board oversees are voluntarily investigated and remediated. The Water Code authorizes the State Water Board to recover reasonable expenses incurred by the Water Boards in overseeing cleanup of unauthorized discharges, contaminated properties, and other unregulated releases adversely impacting waters of the state. A discharger can voluntarily enter the State Water Board's cost recovery program. Parties named in a Cleanup and Abatement Order will be automatically enrolled into the cost recovery program and are jointly and severally responsible to pay the full amount of the invoices that are issued by the State Water Board. The parties may agree to apportion the amount as they see appropriate. If payment in full is not received, the State Water Board will enforce its cost recovery against any or all the parties named in the Cleanup and Abatement Order or to the party that voluntarily agreed to enter the cost recovery program. It is common practice for the Site Cleanup Program to issue a Cleanup and Abatement Owner if any of the following occur: invoices are not paid by a party that voluntarily entered the cost recovery program; investigation and/or remediation does not move forward in a reasonable timeframe; or a discharger is not complying with Central Coast Water Board directives. In accordance with Water Code section 13304 and Resolution No. 92-49, all known dischargers are named in the Cleanup and Abatement Order to ensure progress is made towards restoring water quality, the environment, and protecting human health.
Change Made: No changes were made to the Proposed Order in response to this comment.

City of Santa Maria – 6

LEGAL ANALYSIS:

As stated above, there is no evidence to support the allegation that at some point from 1949 to 1964, TCE was discharged from the SEMCO site in such amounts that the CITY's Well 2AS was fully contaminated in 1985. There is no direct or circumstantial evidence to support the allegation of discharge. There is evidence to identify that the 1973 flushing of 6000 gallons of TCE could have been the potential cause, but that anecdotal information is not documented. It is also speculative that the ARMY may have discharged TCE and contaminated the site.

Notwithstanding the absolute failure to provide any evidence supporting the allegation, the BOARD contends that the CITY "was aware of the activities that resulted in the discharges of waste" by SEMCO between 1949 and 1964. If this fact is accurate, it begs the question of why, between 1985 and 2020, was the CITY not named in any enforcement action. None of the prior responsible parties or dischargers have named the CITY or contended that it was aware of activities that resulted in the discharge of waste.

In order to overcome this minor evidentiary hurdle, the BOARD states in the CAO that:

> A prior owner may be named in a cleanup and abatement order if it knew or should have known that a lessee's activity created a reasonable possibility of discharge into waters of the state of wastes that could create or threaten to create a condition of pollution or nuisance. (United Artists Theatre Circuit, Inc. v. California Regional Water Quality Control Bd. (2019) 42 Cal.App.5th 851, 887.) Landowners leasing to entities using degreasers (many of which used TCE), knew or should have known by the 1940s that there was a reasonable possibility of discharge of wastes that could create, or threaten to create, a condition of pollution or nuisance.

While the BOARD cites the United Artists Theatre Circuit, Inc. v. California Regional Water Quality Control Bd. 42 Cal.App.5th 851 (2019) ("UATC"), it does not bolster the BOARD's position.

In a case determining whether a prior owner of property may be required to participate in the cleanup of wastes discharged from its property that resulted in groundwater contamination, if that person "caused or permitted" the discharge. The court adopted the standard that

> a prior owner may be named in a section 13304 cleanup order upon a showing the owner knew or should have known that a lessee's activity created a reasonable possibility of a discharge into waters of the state of wastes that could create or threaten to create a condition of pollution or nuisance.

The issue in this case is whether, in 1949 through 1964, the CITY as an owner knew that an industrial solvent in common use at the time was a waste that could create or threaten to create a condition of pollution or nuisance. Without that showing, the UATC does not support the BOARD to project liability onto the CITY. The court determined that evidence showed that during and after UATC owned the property in question, "dangers of solvents in general became gradually known." (Id. at 861).

Further, the court specifically rejected the BOARD's position (as it holds here of almost strict liability) that "a prior owner need only have knowledge of the general activity of the tenant that resulted in the discharge." (Id. At 864). Rather the court determined that:

> In the section 13304 context, an owner cannot be said to permit a discharge simply by allowing a lessee to operate a certain type of business, absent knowledge or constructive knowledge that, in general, the business creates a reasonable possibility of discharge. (Id. At 880)

In the context of the proposed CAO, the BOARD attempts to impose liability on the very basis that UATC rejected, namely that the CITY "was aware" of SEMCO's general business as a tool and die manufacturer and therefore is liable for cleanup. That is not the standard and the alleged CAO is not supported by any evidence implicating the CITY.

CONCLUSION:

The CITY is not a discharger under the applicable law and therefore cannot be ordered to perform the tasks as outlined. With respect to the individual tasks, the time allowed by the BOARD is insufficient. Further, the failure to mitigate the contamination from 1985 to present must reduce any potential financial contribution or requirement of the CITY, as the dischargers failure to perform has likely resulted in a more substantial cost of remediation.

The CITY as the reporting party of this situation and the taxpayers who have been deprived of a working well since 1985 are the victims here and should not be punished twice.

The CITY agrees with the BOARD that the contamination must be remediated as it was determined to be an Imminent and Substantial Endangerment hazard in 1994. The CITY is not the party to pay for the remediation.

Staff Response to Comment City of Santa Maria – 6

We disagree. Under the standard detailed in *United Artists Theatre Circuit, Inc. v. Cal. Regional Water Quality Control Bd.* (2019) 42 Cal.App.5th 851, the City is a discharger because it, at a minimum, had constructive knowledge that SEMCO's operations created a reasonable possibility of a discharge to waters of the state from the wastes used in SEMCO's operations and that discharges of those wastes could create or threaten to create a condition of pollution or nuisance. See Staff Response to Comment City of Santa Maria – 2 and 3.

See Attachment 1 for a complete discussion of general early knowledge of hydrogeology, knowledge that operations using degreasers caused groundwater contamination, and knowledge that TCE was a hazardous chemical and its ubiquitous use as a degreaser.

Central Coast Water Board staff acknowledge that the Water Code does not provide equitable remedies or restitution for persons' or entities' past harm, and often dischargers must seek those remedies in civil litigation. The Proposed Order does not preclude the dischargers, including the City, from pursuing contribution from one another or third parties using other legal avenues.

Regarding the comment that the Proposed Order provides insufficient time, the City provides no basis to support that statement and no proposal for alternative deadlines. Without such justification and proposal, Central Coast Water Board staff do not have a sufficient rationale for reconsidering the proposed time schedule. Furthermore, under the terms of the Proposed Order, if the dischargers find that time for individual tasks is insufficient, and can provide an adequate rationale supporting an extension, the dischargers can request an amendment to the time schedule.

Regarding the comment related to the "1973 flushing of 6000 gallons of TCE" not being documented, it is unclear whether the City is referring to a cutting oil discharge, which is well documented in the record. In 1973, a fire occurred at the SEMCO

facility, which set off a sprinkler system that flushed approximately 6,000 gallons of cutting oils from a sump inside the building located at APN No. 111-291-037 . See Central Coast Water Board's July 9, 1993, meeting minutes, referenced in footnote 26 of the Proposed Order.
Change Made: No changes were made to the Proposed Order in response to this comment.

County of Santa Barbara – 1

I. THERE IS NO BASIS FOR NAMING THE COUNTY AS A "DISCHARGER" UNDER THE DRAFT CAO
Naming the County as a discharger under the Draft CAO is inappropriate and improper because it rests on a misapplication of law, without any supporting evidence.

Most glaringly, the Draft CAO does not even purport to identify the first date on which a release of TCE or other contaminants of potential concern occurred at the Site. The Draft CAO merely recites SEMCO's period of operation of the Site from 1949 through 2001 and assumes without evidence that SEMCO first caused a discharge on or before March 9, 1964, when the County sold its entire interest in the Site to the District. The County's internal records review has identified no documentation of any hazardous substances release at the Site during the period of SEMCO's leasehold with the County. Purchase records supplied by SEMCO to the Regional Board indicate that SEMCO procured bulk quantities of TCE from 1981 through 1984, and then purchased bulk quantities of trichloroethane (TCA) from 1984 through 1987, over a decade after the County sold its interest in the Site. The County's expert environmental consultant has reviewed the administrative record for the Site and confirmed it contains no technical information supporting a reasoned conclusion that the first release of TCE occurred prior to 1964. To the extent that the Regional Board attributes the presence of 1,4-dioxane at the Site to SEMCO's former operations, the County's expert consultant also concluded from available records that any discharge of 1,4-dioxane by SEMCO would have occurred no earlier than 1984. Absent any evidence that SEMCO's discharge began during the period of its leasehold from the County, there is no legal basis for naming the County under the Draft CAO.

Even if there were evidence supporting the assumed initial discharge date, the Regional Board misapplies the applicable liability standard articulated in United Artists Theatre Circuit, Inc. v. Cal. Regional Water Quality Control Bd. (2019) 42 Cal.App.5th 851 ("UATC"). Under the UATC standard, a former landlord does not "permit" a discharge within the meaning of Section 13304 unless it "knew or should have known that [the lessee's] activity created a reasonable possibility of a discharge;" a former landlord "cannot be said to permit a discharge simply by allowing a lessee to operate a certain type of business." UATC, 42. Cal.App.5th at 880, 887.

The Draft CAO and administrative record lack any evidence of actual or constructive contemporaneous knowledge on the part of the County of SEMCO's presumed

discharge. First, there is no evidence to support the conclusion that the County possessed actual or constructive knowledge of a release by SEMCO during its leasehold. The County has identified no internal records documenting any hazardous substances release at the Site that occurred during the period of SEMCO's leasehold. The earliest record of the County's actual knowledge of such a release occurred in May 1985. Therefore, there is no basis for the Regional Board to conclude that the County had actual knowledge that SEMCO's activities created a reasonable possibility of a discharge.

Second, the County has found no evidence that any of its employees had contemporaneous constructive knowledge of SEMCO's discharges. The Draft CAO alleges that the County was "aware of the activities that resulted in the discharges" and "[l]andowners leasing to entities using degreasers (many of which used TCE), knew or should have known by the 1940s that there was a reasonable possibility of discharge of wastes." The Draft CAO also touts "[d]ecades of Central Coast Water Board staff experience with industries that use, store, and transfer chemicals," its observation that "[s]tandard chemical handling practices often result in adverse environmental impacts," and "extensive evidence of publicly available information concerning the knowledge of the use of chlorinated solvents (including TCE) resulting in discharges and contamination of water supplies during the relevant timeframe."

The Regional Board's determination to name the County reflects significant conjecture and hindsight bias that cannot substitute for evidence that the County should have known by 1964 that SEMCO's business created a reasonable possibility of a discharge. There is no evidence showing that the County knew of the particular operations, equipment, or materials used in SEMCO's business. Moreover, information about the toxicity of TCE or the linkage between TCE pollution and manufacturing or degreasing activities that could have alerted the County to the risks of a discharge associated with SEMCO's business, was not generally known as of 1964. TCE was even widely used for food and medical uses until the mid-1970s. Therefore, there is similarly no basis for the Regional Board to conclude that the County should have known that SEMCO's activities created a reasonable possibility of a discharge.

Staff Response to Comment County of Santa Barbara – 1
Central Coast Water Board staff disagree. Under the standard detailed in *United Artists Theatre Circuit, Inc. v. Cal. Regional Water Quality Control Bd.* (2019) 42 Cal.App.5th 851, the County is a discharger because it, at a minimum, had constructive knowledge that SEMCO's operations created a reasonable possibility of a discharge to waters of the state from the wastes used at the Site and that the discharge of waste could create or threaten to create a condition of pollution or nuisance. Also, see Staff Response to Comment City of Santa Maria – 3. See Attachment 1 for a complete discussion of general early knowledge of hydrogeology, knowledge that operations using degreasers caused groundwater

contamination, and knowledge that TCE was a hazardous chemical and its ubiquitous use as a degreaser. See Staff Response to Comment Geosyntec Consultants –2 (responding to the 1,4-dioxane discussion).
Change Made: No changes were made to the Proposed Order in response to this comment.

County of Santa Barbara – 2

II. THE DRAFT CAO UNJUSTIFIABLY EXCLUDES ADDITIONAL PARTIES WITH A PLAUSIBLE CONNECTION TO SITE CONTAMINATION

State Water Board Resolution No. 92-49 requires the Regional Board "make a reasonable effort to identify the dischargers associated with the discharge." The Draft CAO omits third parties with a plausible connection to TCE, VOCs, hydrocarbons, and 1,4-dioxane impacts at the Site. The Regional Board cannot justifiably name the County under the Draft CAO without also naming these parties.

a. The U.S. Department of Defense ("DOD")
DOD owned and operated the Site from 1942–1949. In 2014, DOD obtained a "no further action" letter ("NFA") from the Regional Board based upon a misleading No Department of Defense Actions Indicated ("NDAI") report that covered only the portion of DOD's ownership and operation of the Site through 1947 and only a 1.3-acre portion of the approximately 7.31-acre Site. The Regional Board affirmed the NDAI's finding that "[t]he Army used the property in the general area of the SEMCO property for barracks, administrative, and support purposes," despite that the administrative record also indicates that DOD's activities on-Site also included a pump house for well 2AS, three warehouses, and a DOD-owned underground storage tank (UST) number T1242 located in the central portion of the Site. The NDAI further claims that DOD's contractor recommended against a "PRP search" because there was "no indication of the use of solvents by the Army on the property," when the contractor recommended against further investigation because an Army lawyer instructed the contractor to do so based on Army policy.

During the same period, DOD owned and operated the approximately 3,085-acre surrounding Santa Maria Airfield. DOD's operations at the Santa Maria Airfield included operating and ultimately closing a field of more than 200 USTs, including at least 20 gasoline USTs, capable of supporting a substantial airfield operation that would have necessitated substantial solvent usage for onsite aircraft and vehicle maintenance. The Draft CAO proposes to exclude DOD from the listed dischargers based upon existing technical data documenting impacts only in soil and perched groundwater. However, for the purpose of scoping named dischargers' future investigation and cleanup actions, the Draft CAO would require additional lateral and vertical delineation of impacts that the Regional Board assumes may extend to deep groundwater and off-Site areas occurred.

Ultimately, neither the NDAI that formed the basis for the 2014 NFA, nor the administrative record as a whole, contains information concerning (i) the quantities or types of materials stored in on-Site in DOD warehouses, (ii) DOD's use of the on-Site pump house, (iii) confirmation that DOD properly removed or closed in place on-Site UST T1242, (iv) information about DOD's ownership and use of areas of the Site outside of the 1.3-acre portion covered under the NDAI, (v) information about DOD's ownership and use of the Site from 1948 to 1949, or (vi) information supporting the Regional Board's assumption that historic DOD ownership and use of the broader Santa Maria Airfield have not contributed to contamination at the Site.

The Regional Board may exercise its powers to issue Section 13267 investigation orders to fill these and other material data gaps to make a reasonable effort to identify all dischargers. Regardless of whether material data gaps remain, the Regional Board must apply internally consistent and coherent methodologies for naming dischargers under the Draft CAO. In the absence of material information concerning operations at the Site from 1942 onward, there is no reasoned basis for the different treatment of entities in the chain of title at the Site. For these reasons, the Regional Board should add DOD as a named discharger under the CAO.

Staff Response to Comment County of Santa Barbara – 2

In naming a discharger, the Central Coast Water Board must find that there is sufficient evidence to support a finding of a named party's responsibility. *In the Matter of the Petition of Exxon Company USA*, WQ Order 85-7, p. 11-12. At a minimum there must be a causal tie between the discharger and the violating discharge that is at issue in the Proposed Order.

Based on the investigation to date, there is no tie between the subject discharges and the Santa Maria Army Airfield, Department of Defense (DOD). Additionally, based on our records, DOD did not own the property when SEMCO was operating; SEMCO operations commenced in 1949. The contention that the DOD caused or permitted the discharge of TCE at the Site was first raised by SEMCO in 1989 but was unsupported. As documented in a September 1989 Staff Report Concerning SEMCO[46] and memorialized in a Central Coast Water Board letter dated July 26, 1989,[47] there was no data to assign responsibility to the DOD for discharging TCE at the Site. Central Coast Water Board staff assessed a small portion of the former Santa Maria Army Airfield (the SEMCO Site) again in 2014 after a request by the U.S. Army Corps of Engineers (USACE)[48] for no further action related to the TCE impacts in the area of the Site. Consistent with our determination in 1989, Central Coast Water Board

[46] September 1989 Staff Report is available on GeoTracker: https://documents.geotracker.waterboards.ca.gov/regulators/deliverable_documents/5027829825/1989_10_13_Complaint_89-05_STAFF_REPORT_ITEM07_13OCT1989%20(2).pdf

[47] Central Coast Water Board letter dated July 26, 1989 is available on GeoTracker: https://documents.geotracker.waterboards.ca.gov/regulators/deliverable_documents/1251357853/LTR_CLEANUP_26JULY1989.pdf

[48] USACE No Department of Defense Actions Indicated (NDAI) dated January 17, 2014, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=737mj

staff issued a letter[49] recognizing that the DOD was not, at that time, a discharger responsible for Site cleanup responsibilities. Additionally, Central Coast Water Board stated, "Should evidence of site wastes which may have been caused by the [DOD's] use of the property come to our attention in the future, the [Central Coast] Water Board reserves the right to require the [DOD] to undertake site investigation and cleanup actions, if appropriate."

Based on Central Coast Water Board staff's review of the file, one 1,500-gallon fuel oil UST, identified as T1242,[50] was located beneath the Site in an area northeast of the former SEMCO building. There is no evidence in the record that T1242 contained TCE or cutting oil (see footnote 47; T1242 is listed as fuel oil storage). Therefore, the two predominant contaminants SEMCO used in their operations and discharged, resulting in impacts to soil, soil gas, and groundwater beneath the former solvent AST and underground sump, were not present in T1242. As part of USACE's tank removal project in the 1990s at the Santa Maria Public Airport and vicinity, one 1,500-gallon fuel oil UST, identified as T1273[51] was removed from a location north and east of the Site. USACE notes on the T1273 photo state that T1273 was filled with trash.[52] Additionally, Site investigation results included in various reports for soil, soil gas, and groundwater do not show elevated concentrations of TCE or total petroleum hydrocarbons (TPH) that would be indicative of a discharge from an UST located in either of those locations.[53]

Before the Proposed Order was issued, Central Coast Water Board staff met with the City, County, and District ("Public Entities) on three occasions[54] to discuss the Proposed Order and staff's intent to potentially name the Public Entities as dischargers. During and after those meetings, the Public Entities asserted unsubstantiated claims that the DOD first caused TCE pollution at the Site and should be named in any future Site cleanup orders and/or directives. Even though previous investigations ruled out naming the DOD as a discharger, Central Coast Water Board staff issued a Freedom of

[49] Central Coast Water Board letter dated February 21, 2014, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=ud7or

[50] The approximate location of T1242 is shown on the 1945 Basic Layout Plan for the Santa Maria Army Airfield: https://geotracker.waterboards.ca.gov/?surl=yg2dk

[51] Here is a location map showing UST T1273 details on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=zsztx

[52] Page 3 is a photo of T1273 prior to removal; see GeoTracker: https://geotracker.waterboards.ca.gov/?surl=zsztx

[53] GeoTracker links to several reports: 2022 Vadose Zone Site Assessment Report https://geotracker.waterboards.ca.gov/?surl=vft0c; 2021 Soil Vapor Sampling Report and Monitoring Well Investigation Reports https://geotracker.waterboards.ca.gov/?surl=tfods

[54] On December 1, 2020, Central Coast Water Board hosted an initial meeting to discuss the Site's status and ownership history with representatives for the City of Santa Maria and the Santa Maria Public Airport District; on January 13, 2021, Central Coast Water Board also hosted an initial meeting with representatives for the County of Santa Barabara regarding the Site's status and ownership history. On October 25, 2022, Central Coast Water Board staff hosted a second meeting to discuss the Site with representatives for the City of Santa Maria, Santa Maria Public Airport District, and the County of Santa Barbara. Additionally, on March 13, 2023, Central Coast Water Board staff hosted a follow-up meeting (to the October 25, 2022, meeting) regarding the Site with representatives for the City of Santa Maria, Santa Maria Public Airport District, and the County of Santa Barbara.

Information Act (FOIA) request to the US Army Corp of Engineers, requesting all documentation associated with the former army airfield to re-evaluate our previous assessments (in 1989 and 2014). Documents submitted by the USACE are available to the public on the SEMCO and Army Airfield GeoTracker website.[55] After a thorough review of the information request submittal and our own files related to the army airfield, Central Coast Water Board staff have found no documented evidence of pollution related to the army's Underground Storage Tanks (USTs) that have contributed to SEMCO's area of maximum concentrations either by tank location or tank contents.

If the County has information that links additional dischargers to the discharge of wastes at the Site (e.g., a former Site owner or operator during a time when a discharge or threatened discharge of waste occurred), Central Coast Water Board staff will consider the evidence submitted. While Central Coast Water Board staff are open to naming additional dischargers, including the DOD, in subsequent orders for the Site, there is insufficient evidence to support naming the DOD in the Proposed Order at this time.

See Staff Response to Comment Chris Mathys, Rhine, LP – 1

Change Made: No changes were made to the Proposed Order in response to this comment.

County of Santa Barbara – 3

II. THE DRAFT CAO UNJUSTIFIABLY EXCLUDES ADDITIONAL PARTIES WITH A PLAUSIBLE CONNECTION TO SITE CONTAMINATION

b. Mafi Trench

The Draft CAO also fails to name parties associated with the nearby Mafi Trench property, located south of the Site at 3070 Industrial Parkway, Santa Maria, CA, including its owner EFT Enterprises, L.P. The Mafi Trench property is subject to a long-running investigation and cleanup under Regional Board oversight of a dissolved-phase chlorinated VOC plume in groundwater.

The Draft CAO makes no reference to the Mafi Trench site, and nothing in the administrative record provides any reasoning to support the Regional Board's exclusion of Mafi Trench parties under the Draft CAO. The Draft CAO assumes that impacts from the Site have reached deep groundwater, and yet Regional Board staff excluded Mafi Trench from the Draft CAO apparently based upon the belief that Mafi Trench is located downgradient of the Site. However, the Regional Board itself has previously found based upon semiannual groundwater monitoring at the Mafi Trench property that "regional groundwater flow direction was northwest." The Regional Board's own historical findings contradict its apparent view that groundwater gradients run to the

[55] Santa Maria Army Airfield (J09CA061900) (T0608345324) on GeoTracker: http://geotracker.waterboards.ca.gov/?gid=T0608345324

south.

As discussed further below, it is premature for the Draft CAO to require the prior groundwater monitoring network to be restarted or to require off-Site groundwater investigations. Groundwater gradients are either not fully understood or may have changed over time, and the Mafi Trench site is a known and adjacent source of VOC contamination in groundwater. Accordingly, if the Regional Board retains requirements under the Draft CAO for deep groundwater characterization and off-Site delineation, then EFT Enterprises, L.P. and/or other dischargers associated with the Mafi Trench property should be considered suspected dischargers with respect to the Site, and should also be named under the Draft CAO.

Staff Response to Comment County of Santa Barbara – 3

The Proposed Order does not name parties associated with the Mafi Trench cleanup site (Mafi),[56] at this time, for the following reasons:

Parties associated with Mafi never owned, leased, or operated the property associated with the SEMCO Site, based on our records.

Maximum groundwater concentrations of TCE, in the perched aquifer (shallow groundwater) beneath the SEMCO Site, are five orders of magnitude higher (430,000 micrograms per liter [µg/L])[57] than the maximum TCE concentrations ever reported for shallow groundwater at Mafi (7 µg/L)[58].

Maximum concentrations of TCE, in the regional aquifer (deep groundwater) beneath the SEMCO Site, are two orders of magnitude higher (1,200 µg/L)[59] than the maximum TCE concentrations reported for deep groundwater at Mafi (60 µg/L) (refer to footnote 58 for deep groundwater concentrations at Mafi).

Regardless of groundwater flow directions in the vicinity of the Mafi and SEMCO Site, the significantly lower concentrations of TCE in groundwater below Mafi, compared to SEMCO, demonstrate there is a significant source of pollution beneath the SEMCO Site. Additionally, the contamination plume below the SEMCO Site has not been fully characterized and characterization needs to be completed before the Central Coast Water Board could evaluate if a nearby site is impacted groundwater beneath the Semco Site or if the pollution beneath the two sites are connected.

<u>Groundwater Flow Direction</u>

[56] The Mafi Trench cleanup site on GeoTracker: http://geotracker.waterboards.ca.gov/?gid=SLT3S0301290

[57] Supplementary Subsurface Investigation, SEMCO Twist Drill and Tool Company, dated March 8, 1990, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=989w4

[58] Site Conceptual Model for 3037 Industrial Parkway, Santa Maria, dated January 2019, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=dvr1s

[59] 2003 Third Quarter Report for Groundwater Monitoring Activities dated February 24, 2003, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=ntubt

In 1989, Westec Services reported, in the Subsurface Investigation report[60], that the groundwater flow direction of the shallow aquifer, was in an easterly direction. It was reported that groundwater flow was opposite to the topographic gradients due to several factors (e.g., dewatering in the east and recharge coming from the west), potentially resulting in reversals of expected flow directions.

In a 2003 Third Quarter Report for Groundwater Monitoring (see footnote 59), Everest Services, Inc. reported that groundwater in the shallow aquifer was flowing in the south-southeast direction and groundwater in the deep aquifer was determined to be flowing in the south-southwest direction.

In a 2021 Monitoring Well Investigation Report,[61] Analytical Consulting Group, Inc. (ACG) reported that groundwater in the regional aquifer is generally flowing toward the west, with a pumping depression just to the southeast of the Site, which ACG reported likely caused a seasonal reversal of groundwater flow towards the south or southeast (information in the report referenced from the *2019 Annual Report of Hydrogeologic conditions Water Requirements, Supplies, and Disposition, Santa Maria Valley Management Area*). However, ACG also noted that a site-specific groundwater flow direction has not yet been determined for the deep aquifer beneath the Site.

Reports submitted on behalf of the Mafi Trench site indicate groundwater flow in the shallow aquifer beneath Mafi is toward the west to southwest direction and that the regional aquifer groundwater flow direction is toward the west-northwest. However, Mafi has only one deep groundwater monitoring well and cannot calculate a site-specific groundwater flow direction for deep groundwater that also takes into consideration the pumping influence of nearby supply wells.

The additional investigation of the shallow and deep aquifers beneath the SEMCO Site, as required in the Proposed Order, must be implemented to determine current hydrogeologic conditions, including groundwater flow direction in both the shallow and deep aquifer. Central Coast Water Board staff acknowledge that there are data gaps in the measurements of the deep aquifer beneath MAFI and the SEMCO Site, resulting in the reporting of fluctuating groundwater flow directions. The 2003 measurement of deep groundwater is the only site-specific measurement in the SEMCO area and it indicates deep groundwater historically moved toward Mafi at the time of measurement in 2003.[62] As is standard in other cleanup sites that have significant sources of pollution, a regular monitoring program is needed to fully understand groundwater flow direction and contaminant fate and transport.

[60] Subsurface Soil Investigation dated January 1989, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=et3dz
[61] Monitoring Well Investigation Report dated July 16, 2021, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=54phn
[62]Central Coast Water Board staff comments on 2003 groundwater flow measurements, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=sr998

Staff Response to Comment Chris Mathys, Rhine, LP – 1
Change Made: See revisions to Section A.18 of the Proposed Order

County of Santa Barbara – 4

II. THE DRAFT CAO UNJUSTIFIABLY EXCLUDES ADDITIONAL PARTIES WITH A PLAUSIBLE CONNECTION TO SITE CONTAMINATION

c. Four Additional Unspecified Potential Sources
Additionally, a survey developed concurrently with initial discovery of TCE in groundwater at the Site identified the presence of at least four unspecified properties in the vicinity of the Site that could be sources of groundwater contamination. That survey found four unspecified potential sources that used or were then using TCA, including a facility with a 5,000-gallon waste oil UST and another which was ordered to cease discharging solvents into a 60- to 70-foot dry well.

The Draft CAO fails to reference these four suspected sources. It is unclear from the Draft CAO what effort, if any, the Regional Board has made to identify these four sources, investigate their relationship to the Site, and if warranted, name them under the Draft CAO.

Staff Response to Comment County of Santa Barbara – 4
See Staff Response to Comment Chris Mathys, Rhine, LP – 1 The record indicates that industries and properties surrounding Well 2AS were inspected and soil samples were collected during initial investigations in May 1985.[63] In fact, as a result of the soil sample analysis and further investigation of solvent handling practices at SEMCO, Santa Barbara County Health Care Services (later known as County Environmental Health Services or EHS) required SEMCO to determine the vertical and lateral extent to which soils in front of the Well 2AS were contaminated with TCE. After 1985, additional investigations of the SEMCO operation provided evidence that SEMCO stored VOCs (specifically TCE and 1,1,1-TCA) in aboveground storage tanks (ASTs) east of the SEMCO shop building and stored cutting oil in an onsite underground sump. SEMCO utilized TCE for approximately 36 years (between 1949 and 1985),[64] as a degreaser for tools and metal parts. SEMCO's operations generated waste products containing these substances (specifically cutting oil and TCE for degreasing metal parts) during that time. SEMCO also stored VOC sludge

[63] Central Coast Water Board Internal Memo dated September 25, 1987, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=kxkrc
[64] Central Coast Water Board Hearing Staff Report dated October 13,1989, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=tuqaz

(mixture of TCE, TCA and waste oil from operations) in 55-gallon drums and maintained parts-cleaning tanks behind its main building (refer to photographs referenced in Staff Response to Comment City of Santa Maria – 3). Sampling conducted in the area behind the main building, confirmed elevated concentrations of VOCs and petroleum hydrocarbons in soil and groundwater, indicating wastes were discharged behind the SEMCO facility, as detailed in the Proposed Order. The Dischargers named in the Proposed Order are required to address the TCE and associated VOCs, petroleum hydrocarbons, and 1,4-dioxane discharged onsite to soil, soil gas, and groundwater at the SEMCO Site based on the evidence in our records.

Should the named dischargers discover, through site assessment and investigation, that there is a secondary source or comingled plume of VOCs, petroleum hydrocarbons, and 1,4-dioxane from an offsite source, or an additional operator, they can submit such evidence at any time for the Central Coast Water Board to review and consider whether additional dischargers should be named in the Proposed Order.

Change Made: No changes were made to the Proposed Order in response to this comment.

County of Santa Barbara – 5

II. THE DRAFT CAO UNJUSTIFIABLY EXCLUDES ADDITIONAL PARTIES WITH A PLAUSIBLE CONNECTION TO SITE CONTAMINATION

d. Other Parties with a Relationship to the Site
For consistency with applicable legal authorities, and to ensure that named dischargers have adequate Site access to enable performance of additional Site investigations that would be required to comply with the Draft CAO, certain tenants of the Site and nearby properties should also be named.

First, the Draft CAO fails to name Art Craft Paint, Inc., the lessee of property at 3203 Lightning Street located nearby and to the south of the Site. The Regional Board wrote recently that "[t]he Art Craft Paint cleanup site . . . is located downgradient of the Semco site and is a soil-only contamination site with no evidence of impacts to groundwater." To the contrary, since March 2019, Art Craft Paint Inc. has been subject to a Consent Order entered with the County's Environmental Health Services' Site Mitigation Unit ("SMU") that requires Art Craft Paint, Inc. "to complete corrective actions related to potential contamination of soil and groundwater." Soil investigation work in the vicinity of a collection trench proposed by Art Craft Paint has been approved by SMU as a first step in this investigation; no investigations of the Art Craft Paint site have yet ruled out potential groundwater impacts or characterized groundwater gradients at this property. Because the Regional Board insists that further vertical and horizontal delineation is needed at the Site, there is no evidentiary basis to support the Regional Board's apparent conclusion that Art Craft Paint, Inc. has not caused or permitted an offsite

discharge of TCE or other VOCs affecting on-Site conditions.

Staff Response to Comment County of Santa Barbara – 5
See Staff Response to Comment Chris Mathys, Rhine, LP – 1 Santa Barbara County Public Health Department Environmental Health Services are overseeing the Art Craft Paint, Inc. site and are currently requiring the investigation of subsurface soil. There is no evidence of groundwater impacts beneath the Art Craft Paint, Inc. site currently.
Change Made: No changes were made to the Proposed Order in response to this comment.

County of Santa Barbara – 6

Additionally, the Draft CAO states that Santa Maria BBQ Outfitters and Hans Duus Blacksmithing are current tenants that use the Site for “warehousing products and metal fabrication” and “welding and metalworking,” respectively. As the Draft CAO itself recites, a “discharge” includes not only the initial release of hazardous substances into the environment, but also continuing uncontrolled movement of past releases in the subsurface. If the Regional Board concludes there are continuing uncontrolled discharges of VOCs or other hazardous substances at the Site, then each current tenant has permitted and continues to permit a discharge under this standard. Moreover, there is no evidence in the administrative record to rule out either of these parties as having potentially caused Site contamination through their own actions. The Regional Board should therefore issue Section 13267 information orders to current Site tenants, and each current tenant should also be added as named dischargers under the Draft CAO.

Staff Response to Comment County of Santa Barbara – 6
If current Site tenants do not provide access for investigation and remediation activities and/or for any infrastructure that may be necessary for assessment and/or remediation activities, then those tenants may be added as a discharger to the Cleanup and Abatement Order, if issued, and will be responsible for fulfilling the obligations imposed by it. To date, there is nothing to suggest that the current Site tenants will deny such access. See Staff Response to Comment Chris Mathys, Rhine, LP – 1
Change Made: No changes were made to the Proposed Order in response to this comment.

County of Santa Barbara – 7

III. THE DRAFT CAO’S REQUIREMENTS ARE OVERLY-PRESCRIPTIVE, INFEASIBLE, AND VIOLATE APPLICABLE STATE BOARD POLICY

The evidence demonstrates that the County should not be named as a discharger under the Draft CAO. Without stipulating the validity of any assertions or allegations contained in the Draft CAO, and without waiver of any privileges, immunities, or defenses to liability, the County offers the following additional comments on the Draft CAO.

a. The Required Actions are Overly Prescriptive and Unreasonable

State Board Policy 92-49 requires that, in the absence of exceptional circumstances, the Draft CAO follow a "progressive sequence" from site assessment, to investigation, remedy selection, implementation, and finally monitoring. Policy 92-49 also requires the Regional Board to give alleged dischargers subject to a CAO "the opportunity to select cost-effective methods" for investigation and cleanup. The Required Actions set forth at Section F of the Draft CAO fall short of these requirements in several respects.

For instance, the Draft CAO would require the named dischargers to resuscitate the former groundwater monitoring network, originally installed in the early 1990s, and recommence quarterly monitoring. The Draft CAO requires named dischargers to locate 20 former groundwater monitoring wells, perform integrity tests, recondition accessible and functional wells, destroy inaccessible or nonfunctional wells, and replace them with new monitoring wells. Because simply locating historical wells may be infeasible, the named dischargers should not be required to undertake more than customary GPS searches and a basic geophysical survey. Automatically requiring the former groundwater monitoring network to be reactivated improperly puts monitoring ahead of site assessment and precludes the named dischargers from designing and selecting suitable site assessment methods and remedial design options in contravention of Policy 92-49. Instead, the Regional Board should allow the named dischargers to determine feasibility, remedial design, and monitoring based upon first performing and considering additional investigation.

Moreover, even if resuscitating the former monitoring network was technically justified, because the locations of former wells are unknown, the Draft CAO could require the named dischargers to secure additional property or access rights from third parties not subject to the order. The feasibility and cost-effectiveness of obtaining property and access rights has not been evaluated.

Without explanation, the Draft CAO also proceeds directly to mandates for onerous requirements for delineation of impacts to soil, soil gas, and groundwater, including deep groundwater and off-Site media. The requirements at Section F.3 do not bear a reasonable relationship to the administrative record or even the Draft CAO itself. For example, the Draft CAO requires the named dischargers to drill new deep groundwater monitoring wells to 220-250 feet below ground surface (bgs) when the Regional Board's rationale for excluding the DOD, Art Craft Paints, Inc., and Mafi Trench parties, amounts to a technical conclusion that Site impacts are limited to shallow soil and shallow perched groundwater. The Draft CAO also requires an investigation of on-Site vapor intrusion (VI) risks when the administrative record already reflects recent VI investigation that reflected levels of TCE beneath applicable Regional Board

commercial screening levels. The Draft CAO also would deprive the named dischargers from excluding from further investigation data gaps determined based on the opinion of a qualified environmental consultant to be immaterial. In light of the record, the requirements for fresh and comprehensive lateral and vertical delineation across all conceivably impacted media are not technically justified and fail to consider cost-reasonableness in violation of Policy 92-49.

Finally, the Draft CAO improperly requires a remedial action plan (RAP) to be designed that will reduce wastes in contaminated media to background concentrations. Requiring cleanup to background levels is not feasible or technically justified at all sites. The Draft CAO should be revised consistent with Policy 92-49, which requires conditions to be remediated to background only where reasonable, or else to an alternative level that is economically and technologically feasible.

Staff Response to Comment County of Santa Barbara – 7

The Proposed Order complies with State Water Board Resolution No. 92-49 and Water Code section 13360, which prohibits the Regional Water Boards from specifying, but not suggesting, methods a discharger may use to achieve compliance with requirements or orders. It is the dischargers' responsibility to propose methods for Central Coast Water Board staff review and concurrence to achieve compliance with requirements or orders.

The Central Coast Water Board has the authority to require cleanup of waste discharges to background. (See Water Code section 13304; State Water Board Resolution No. 92-49.) State Water Board Resolution No. 92-49 makes clear that the intention of investigation and cleanup and abatement is to protect human health and the environment. California Code of Regulations, title 23, section 2550.4, clarifies that the requirement applies to all media, including soil vapor.

Determining the location of all monitoring wells at the Site is imperative to evaluate the condition of the wells. Monitoring wells that are "missing" or left in disrepair are potential conduits for additional discharges and contamination to both shallow and deep groundwater. Every effort must be made to locate the historical monitoring well network as described in the Proposed Order. If the previously installed wells are not located, the efforts taken to look for those wells must be documented in the completion report, and a recommendation to replace the well(s) with new well(s), as required in Section F, item 1.d of the Proposed Order, must be provided.

The Proposed Order directs the Dischargers to propose the installation of new wells and to replace damaged wells or unlocated wells. The Proposed Order does not dictate where replacement wells must be located. The dischargers could potentially recommend new monitoring wells as replacement wells in new locations based on their assessment of the existing groundwater monitoring well network. Central Coast Water Board staff will need to review and concur with the dischargers' proposed scope of work to ensure the pollution is properly delineated.

Promptly evaluating, proposing replacement wells, and sampling existing wells is key to determining groundwater flow direction, threat to supply wells, and baseline conditions of the shallow and deep aquifers beneath the Site.

The Central Coast Water Board has made no determination that site wastes are "limited" to shallow soil and groundwater in the Proposed Order or otherwise. In fact, the Proposed Order specifically states that concentrations of VOCs, petroleum hydrocarbons and 1,4-dioxane documented in section A.14 (summary of maximum concentrations in shallow and deep groundwater beneath SEMCO) exceed water quality objectives, specifically California maximum contaminant levels (MCLs) for VOCs. In 2003, TCE was reported at 1,200 micrograms per liter (µg/L) in deep groundwater monitoring well GWDMW2; the MCL for TCE is 5.0 µg/L. Therefore, the Proposed Order appropriately requires the investigation of deep groundwater to delineate the lateral and vertical extent of the contamination in the deep aquifer. The requirement to delineate the vertical and lateral extent of the groundwater plume has been included in numerous Orders issued by Central Coast Water Board and has not been completed to date.

Central Coast Water Board staff's rationale for excluding Mafi and Art Craft Paints, Inc. is not included in the Proposed Order but addressed in Staff Response to Comment County of Santa Barbara -3, and -5, respectively. Central Coast Water Board staff's rationale for excluding the DOD as a discharger is included in the Proposed Order and in Staff Response to Comment County of Santa Barbara – 2, and in no way implies SEMCO's contamination is "limited to shallow soil and perched groundwater" as stated by the commenter.

Central Coast Water Board staff's rationale for requiring additional vapor intrusion risk evaluation is discussed in Staff Response to Comment Geosyntec Consultants – 1.

Change Made: See revisions to Section F.1.d of the Proposed Order.

County of Santa Barbara – 8

III. THE DRAFT CAO'S REQUIREMENTS ARE OVERLY-PRESCRIPTIVE, INFEASIBLE, AND VIOLATE APPLICABLE STATE BOARD POLICY

b. The Compliance Schedule is Technically and Practically Infeasible
Policy 92-49 requires the Regional Board to set compliance schedules that take account of the "financial and technical resources available to the discharger" while "minimizing the likelihood of imposing a burden on the people of the state with the expense of cleanup and abatement, where feasible."

Instead, the Draft CAO establishes an inflexible schedule for compliance with its investigation, cleanup, and monitoring requirements. For reasons more particularly described in the attached technical comments from the County's expert consultant, these timelines may not be technically or practically feasible. The Draft CAO should also

be revised to allow greater adjustability in response to future site investigation and assessment.

The Draft CAO also requires the named dischargers to provide Site access to the Regional Board, without any consideration that the County has no property rights at the Site or ability to guarantee access to the Regional Board. Property access is controlled by Rhine LP and its affiliates, the current Site owners. Property access is also controlled by current tenants, Santa Maria BBQ Outfitters and Hans Duus Blacksmithing, each of whom has been unjustifiably omitted from the Draft CAO as discussed above. As applied to the other named dischargers, the requirement to provide site access is potentially infeasible.

The initial compliance deadlines established under Exhibit 4 to the Draft CAO are also likely to be practically infeasible. Before the dischargers can meet the first deadline schedule for 90 days following the issuance of the final CAO, arrangements for cooperation among the named dischargers will need to be established. The Draft CAO also fails to allot sufficient time given that three of the alleged dischargers are public entities that are required by law to follow local procedural requirements to authorize workplans and sign-off on budgets, the financial burden of which would ultimately be borne by local taxpayers. The schedule also fails to leave sufficient room for the public agency dischargers to deal with SEMCO's corporate successors, whose history at the Site includes numerous notices of violation and fines for noncompliance with prior Regional Board orders. Without greater flexibility built into the compliance schedule, the Draft CAO will violate Policy 92-49 by setting a schedule insensitive to feasibility concerns and placing an undue burden on public entities.

Staff Response to Comment County of Santa Barbara – 8

Central Coast Water Board staff disagree. The Proposed Order allows for flexibility in the time schedule. Under the terms of the Proposed Order, if the dischargers find that time for individual tasks is insufficient, and can provide an adequate rationale supporting an extension, the dischargers can request an amendment to the time schedule.

The fact that the commenter is not a current property owner with rights to access the Site is not a justification to warrant altering the Proposed Order. There is no indication that current property owners or tenants would impede access to the Site for cleanup and abatement activities.

Water Code section 13304 obligates any person that has "caused or permitted" waste to be discharged where it is, or probably will be, discharged into waters of the state and creates, or threatens to create, a condition of pollution or nuisance, to clean up the waste, abate effects of the waste, or take other necessary remedial action. The key question in assigning responsibility for the cleanup and abatement of waste is whether the discharger caused or permitted the discharge. There is no evidence to suggest that Santa Maria BBQ Outfitters and Hans Duus Blacksmithing

caused or permitted the discharge of waste to waters of the state at the Site. See Staff Response to Comment Chris Mathys, Rhine, LP – 1 The fact that there are multiple dischargers does not justify altering the Proposed Order. The Central Coast Water Board disagrees that 90 days is insufficient to allow for cooperation and coordination among multiple dischargers. The Central Coast Water Board encourages parties to work collaboratively to investigate and clean up discharges. However, per the Proposed Order, if the dischargers find that time for individual tasks is insufficient, and can provide an adequate rationale supporting an extension, the dischargers can request an amendment to the time schedule.
Change Made: No changes were made to the Proposed Order in response to this comment.

County of Santa Barbara – 9

IV. CONCLUSION

The Regional Board should decline to name the County as a discharger under Water Code Section 13304(a) for the reasons stated in these comments. There is no evidence to support the Regional Board's conclusions that a discharge occurred during the County's ownership of the Site, or even if it did, that the County had contemporaneous actual or constructive knowledge of SEMCO's activities to conclude that the County "permitted" such a discharge.

If the Regional Board elects to approve the Draft CAO while naming the County as a discharger, it should update the list of named dischargers to include DOD, Art Craft Paint, Inc., EFT Enterprises, L.P., other current or former owners and operators of the Mafi Trench property, Santa Maria BBQ Outfitters, and Hans Duus Blacksmithing. The administrative record demonstrates that each of these parties has as much or more reason to be named under the Draft Order than the County.

In either case, the Regional Board should amend the Draft CAO to respect the binding requirements of State Board Policy 92-49. The final CAO must be feasible, preserve the named dischargers' right to design and control investigation and remediation in a cost-effective manner, and set realistic compliance schedules.

Staff Response to Comment County of Santa Barbara – 9
See Staff Response to Comment County of Santa Barbara 1 through 8.
Change Made: No changes were made to the Proposed Order in response to this comment.

Geosyntec Consultants (on behalf of County of Santa Barbara)– 1

B. LAW AND REGULATORY CONSIDERATIONS

B.4: *"Vapor intrusion poses a potential threat to current and future tenants, and other persons who may frequent the site…Moreover, offsite and onsite soil gas concentrations exceed ESL* [San Francisco Bay Regional Water Quality Control Board Environmental Screening Level] *residential screening levels for TCE* [trichloroethene] *and PCE* [tetrachloroethene] *of 16 µg/m3* [micrograms per cubic meter] *and 15 µg/m3…As long as the waste remains in the subsurface the risk for vapor intrusion continues to exist which poses a threat to human health." – Draft CAO*

Based on recent indoor and outdoor air sampling data collected in February 2021 and April 2022 within and in the vicinity of the former SEMCO buildings, indoor air concentrations did not exceed commercial screening levels. The consultant concluded that vapor intrusion from soil and/or groundwater is not expected to result in excess risk to occupants under the current commercial land use. Following its review of the reports, the Regional Board issued a letter dated July 28, 2022, concurring with the consultant, and stating that: "The March 2021 and January 2022 indoor air results do not indicate an immediate vapor intrusion threat to the Site building occupants based on current operations."

Further, while TCE concentrations exceed residential screening levels, the Site is zoned for commercial/industrial use. Review of aerial photography indicates the closest residential properties hydraulically downgradient of the Site with regards to the southeasterly shallow groundwater flow direction (noted in Section A18 of the Draft CAO) are approximately 0.5 miles from the former SEMCO buildings. The closest residential properties hydraulically downgradient of the Site with regards to the southwesterly regional groundwater flow direction (noted in Section A18 of the Draft CAO) are approximately 1.6 miles from the former SEMCO buildings. Historical assessments performed at the Site indicated the shallow, perched groundwater is laterally discontinuous; this is supported in Section A18 of the Draft CAO): "Groundwater is found in … a perched water-bearing zone (shallow water-bearing zone) approximately … 150-200 feet in lateral extent."

Based on the above, the Draft CAO contradicts the recent data as well as the Regional Board's July 8, 2022, letter acknowledging that a vapor intrusion threat does not exist to current Site building occupants.

Staff Response to Comment Geosyntec Consultants – 1
Central Coast Water Board staff disagree. Central Coast Water Board staff previously stated that the 2021 and 2022 indoor air results do not indicate an immediate vapor intrusion threat. An immediate vapor intrusion threat would require immediate mitigation and is a vapor intrusion risk above points of departure[65] (i.e., exceeding cancer risk of 10^{-6} and hazard index of 1) per Department of Toxic Substance Control

[65] In toxicology, points of departure refer to calculated human health risk thresholds, or a dose at which a biological response is first observed and is a basis for making extrapolations needed for assessing risks.

(DTSC) guidance.[66] The 2021 and 2022 indoor air results show that the building occupants are not breathing vapors that exceed acceptable cancer risk values for commercial use at the time of the tests, which DTSC refers to as a low priority building. Soil gas and sub-slab soil gas, however, are elevated above points of departure as reported in 2021.[67] DTSC guidance clearly states that low priority buildings with potential future vapor intrusion risk scenarios should be re-evaluated for vapor intrusion risk as the conceptual site model evolves with additional sampling data and lines of evidence (e.g., soil gas concentrations increase). Until the source of TCE is removed, there continues to be a vapor intrusion risk.

Despite numerous orders requiring the delineation of the lateral and vertical extent of TCE in soil, soil gas, and groundwater originating from the Site, the extent of TCE contamination has never been determined by the previously named dischargers. The Proposed Order is needed because the contamination has not been delineated or evaluated for remedial actions to clean up the sources of contamination. When site cleanup program staff stop making progress with currently identified dischargers through a voluntary process, issuance of a cleanup and abatement order is a typical next step to ensure protection of water quality and public health.

Change Made: No changes were made to the Proposed Order in response to this comment.

Geosyntec Consultants (on behalf of County of Santa Barbara) – 2

C. DISCHARGES

C.5: *"A prior owner may be named in a cleanup and abatement order if it knew or should have known that a lessee's activity created a reasonable possibility of discharge into waters of the state of wastes that could create or threaten to create a condition of pollution or nuisance...Landowners leasing to entities using degreasers (many of which used TCE), knew or should have known by the 1940s that there was a reasonable possibility of discharge of wastes that could create, or threaten to create, a condition of pollution or nuisance." – Draft CAO*

In support of this finding the Regional Board cites "Central Coast Water Board files contain extensive evidence of publicly available information concerning the knowledge of the use of chlorinated solvents (including TCE) resulting in discharges and contamination of water supplies during the relevant timeframe." The presence or absence of such information in the Regional Board files is not evidence of the County's knowledge of degreaser use on the property or the reasonableness that the County should have known about the likelihood of a discharge from the property between 1949 and 1964.

[66] DTSC Supplemental Guidance: Screening and Evaluating Vapor Intrusion dated February 2023: https://dtsc.ca.gov/wp-content/uploads/sites/31/2023/02/VI_SupGuid_Screening-Evaluating.pdf
[67] Soil Vapor Sampling Report dated July 16, 2021, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=eqp14

Furthermore, there is no evidence that a release of TCE first occurred at the Site prior to 1964. The first evidence of potential environmental contamination at the Site was not until 1985, over 20 years after the County's sale of the property. SEMCO operated at the Site until 2001. Records submitted by SEMCO to the Regional Board demonstrate that SEMCO purchased bulk quantities of TCE from February 1981 through December 1984. Geosyntec finds no technical support in the administrative record to support the assumption that SEMCO's initial discharge of TCE or other wastes occurred during the County's period of ownership of the Site.

Additionally, the purchase records submitted by SECMO to the Regional Board demonstrate that any release by SECMO of 1,4-dioxane, a stabilizer historically used with trichloroethane (TCA), would have occurred after 1984. Specifically, purchase orders and receipts submitted to the Regional Board by SEMCO demonstrate that it procured bulk quantities of TCA only from November 1984 through December 1987. The Draft CAO has identified no other probable source of 1,4-dioxane to the extent it is present in soil, soil gas, or groundwater at the Site.

Staff Response to Comment Geosyntec Consultants – 2

See Staff Response to County of Santa Barbara – 1

See Staff Response to Comment City of Santa Maria – 3

Regarding Geosyntec's comment on 1,4-dioxane, Central Coast Water Board staff disagree. General information available to the public provides documentation that 1,4-dioxane was used as a stabilizer for both TCE and 1,1,1-TCA, as early as the late 1950s. The Interstate Technology Regulatory Council (ITRC) states the following regarding 1,4-dioxane and TCE[68]:

"Although it is relatively less reactive with aluminum and other metals that is 1,1,1-TCA, TCE has nevertheless been stabilized[69] for vapor degreasing applications since at least the 1940s."

"…definitive documentation of 1,4-dioxane as a stabilizing agent for TCE is insufficient due to the lack of specificity in early patent literature describing TCE formulations. Despite this lack of definitive documentation, given the increased use of 1,4-dioxane for solvent stabilization since the late 1950s and the existences of many different TCE manufacturers throughout the twentieth century, it is possible that some stabilized TCE contained 1,4-dioxane."

[68] History of Use and Potential Sources of 1,4-dioxane, Interstate Technology Regulatory Council (ITRC): https://14d-1.itrcweb.org/history-of-use-and-potential-sources/#1_1&gsc.tab=0

[69] Stabilizers are required to inhibit reactions between the solvent and the metals, which form acids as the solvent decomposes. The solvents typically are stabilized and then sold commercially. 1,1,1-TCA is an order of magnitude more reactive with aluminum than TCE; therefore 1,1,1-TCA requires a greater level of stabilization than TCE, which is why it is mainly associated with 1,1,1-TCA, but not exclusively (ITRC, footnote 61).

"Finally, note that the presence of 1,4-dioxane in metal working and degreasing activities is not limited to the use of 1,1,1-TCA. 1,4-Dioxane was used in some cutting oils used in machining, at levels as high as 16.5%. These cutting oils could be carried in the waste TCE from degreasing operations, independent of any use of 1,1,1-TCA. Therefore, sites where TCE is detected, associated with these metal working processes, should also be considered for sampling of 1,4-dioxane." Based on the available evidence discussed and cited in this response to comments, SEMCO was using TCE and cutting oil in their operations since operations began in 1949 until approximately 1985 (TCE) and until operations ceased in approximately 2001 (cutting oil). Therefore, Central Coast Water Board staff do not agree that you can definitively claim 1,4-dioxane was not discharged during standard operating practices throughout the time SEMCO used TCE and cutting oil while leasing the Site from the County or the City.
Change Made: No changes were made to the Proposed Order in response to this comment.

Geosyntec Consultants (on behalf of County of Santa Barbara) – 3

C. DISCHARGES

C.6: *"County of Santa Barbara, City of Santa Maria, and Santa Maria Public Airport District, are dischargers because they were aware of the activities that resulted in the discharges of waste and, as lessors of the Site, had the ability to control those discharges." – Draft CAO*

No evidence is presented in the Draft CAO that indicates the County was aware of activities being performed at the Site during SEMCO's tenancy, or the potential for those activities to result in a discharge of waste. Therefore, the County would not have been able to control any discharges of waste by SEMCO.

In addition, no specific source of the contamination attributed to SEMCO has been determined, such as a known release during the time the Site was leased to SEMCO. Without knowledge of the cause of the release, there is no evidence that the County knew of the activities leading to the release or had the ability to control a discharge. In fact, there is no evidence that a discharge of waste occurred at all during the time SEMCO was a tenant of the County.

Staff Response to Comment Geosyntec Consultants – 3
See Staff Response to County of Santa Barbara – 1 See Staff Response to Comment City of Santa Maria – 3 See Attachment 1 for a complete discussion of general early knowledge of hydrogeology, knowledge that operations using degreasers caused groundwater

contamination, and knowledge that TCE was a hazardous chemical and its ubiquitous use as a degreaser.
Change Made: No changes were made to the Proposed Order in response to this comment.

Geosyntec Consultants (on behalf of County of Santa Barbara) – 4

C. DISCHARGES
C.12: *"The Central Coast Water Board [Regional Board] will consider whether additional dischargers caused or permitted the discharge of waste at the Site, and whether additional dischargers should be added to this Order. The Central Coast Water Board may amend this Order or issue a separate order or orders in the future as more information becomes available." – Draft CAO*

Review of documentation available on the GeoTracker database has identified several potential sources of groundwater impacts that do not appear to have been fully investigated. In particular, a Department of Public Works (DPW) internal memorandum dated July 2, 1985, documents the identification of potential sources of trichloroethane (TCA) in groundwater during a survey performed by the County of Santa Barbara Health Toxic Substances division and the DPW in May 1985. The survey was performed in response to the identification of contamination in Well 2AS. According to the memorandum, waste discharge records indicated that at least four vicinity industries used or were using TCA, including an unnamed facility with a 5,000-gallon waste oil UST and a separate facility which was ordered to cease discharging solvents into a 60 to 70 foot dry well. These facilities have not been noted or named as potentially responsible parties in the Draft CAO.

Requested Tentative Order Revisions:

Staff Response to Comment Geosyntec Consultants – 4
See Staff Response to Comment County of Santa Barbara – 2, 3, 4, 5, and 6 See Staff Response to Comment City of Santa Maria – 3
Change Made: No changes were made to the Proposed Order in response to this comment.

Geosyntec Consultants (on behalf of County of Santa Barbara) – 5

F. REQUIRED ACTIONS
F.1: *"Evaluate Condition of and Restore the Existing Groundwater Monitoring Network and Evaluate the Condition of the Onsite Groundwater Extraction and Treatment System" and "After completion of the work, the Dischargers must submit a completion report summarizing the condition of the monitoring well network and groundwater*

treatment system infrastructure. The completion report must also include a monitoring well network restoration workplan for the reconditioning of existing accessible and functional wells, destruction of any existing wells that cannot be restored, and a proposal for the installation of any new wells necessary to replace wells recommended for destruction or for existing wells that cannot be located." – Draft CAO

Identifying the locations of all wells within the existing groundwater network may be infeasible and impractical. In some cases, it can be challenging or impossible to find historical wells which have become buried or otherwise obscured. The requirement to locate all historic monitoring wells should be limited to the extent the monitoring wells can be identified through GPS location and basic geophysical surveys.

"The Dischargers are also required to submit a workplan that includes a scope of work to assess the current condition of the onsite groundwater extraction and treatment system including the condition of groundwater extraction wells (EW-1 through EW-5) and determine if the system is operable." – Draft CAO

It is not appropriate to evaluate the condition and operability of the groundwater extraction and treatment system (GETS) prior to completing a Feasibility Study and Remedial Action Plan. The GETS has not been operational for over 20 years after operating for six years with poor remedial effectiveness. There is no evidence that it would be more effective now than it was in 1994. Allocating resources to evaluating the system's condition and operability is premature.

Staff Response to Comment Geosyntec Consultants – 5
Regarding the location of groundwater monitoring wells, see Staff Response to Comment County of Santa Barbara – 7. Regarding the GETS workplan: The Proposed Order does not include requirements to operate the GETS for Site remediation as the commenter argues. The GETS must be evaluated because it includes 5 extraction wells that have not been properly destroyed. The extraction wells must be accounted for to prohibit pollution pathways beneath the Site, as previously discussed above regarding the missing groundwater monitoring wells. Additionally, as recent as 2019, discharger Chris Mathys has claimed there is an "on-site ground water cleaning system."[70] Therefore, the Proposed Order requires the dischargers to confirm the existence of the system and report on the condition of the extraction wells.
Change Made: See clarification made in Section F.1.b.

Geosyntec Consultants (on behalf of County of Santa Barbara) – 6

F. REQUIRED ACTIONS

[70] Chris Mathys letter to Central Coast Water Board and State Resources Control Board dated June 19, 2019, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=44j4h

F.3 "Complete Onsite and Offsite Investigation: The Dischargers are required to submit a workplan to investigate the extent of all wastes in soil, soil gas, and groundwater onsite and offsite." – Draft CAO

The requirement to investigate "all wastes on-site and off-site" is overly broad and unrelated to the former operations of Semco, the only suspected source of TCE at the site. Instead, the investigation must be limited to the extent of wastes related to known or suspected discharges by Semco in soil, soil gas, and groundwater.

F.3.e.vii "Summary of all historic and new soil, soil gas, indoor air, and groundwater analytical data in tabular format." – Draft CAO
The County did not participate in historic sampling activities, has no knowledge of the quality or procedures used in collecting historic data, and does not have access to electronic databases of historic data. Transcribing historical data is labor intensive. Historical data would be considered in the summary of investigation by reference to original documents, but the Draft CAO should be revised to require that only new data be tabulated.

Staff Response to Comment Geosyntec Consultants – 6

Central Coast Water Board staff disagree. As a point of clarity, and as described in the Proposed Order, the discharges from SEMCO's operations are not limited to TCE. Regardless, the requirement to complete delineation of the vertical and lateral extent of the discharge originating from the Site is not overly broad and is consistent with State Water Board Resolution No. 92-49; investigate and clean up and abate the entire extent of waste discharge.

As stated in other comment responses, the results of the investigation required by the Proposed Order may or may not support the inclusion of additional dischargers in future investigation and/or cleanup requirements. The Central Coast Water Board will carefully review the data, findings, conclusions, and recommendations that result from the investigations conducted to comply with the Proposed Order requirements. If the Board determines that additional dischargers should be included in subsequent investigation or cleanup requirements, the Proposed Order provides flexibility to add additional dischargers. (See Proposed Order, Section E.3.)

The dischargers named in the Proposed Order, and the public more generally, all have access to SEMCO's historical data on GeoTracker.[71] Regardless of the County's ability to determine the quality or procedures used in collecting the historical data, summarizing such data in investigation reports is a standard industry practice. It is necessary to include historical data in reports to evaluate trends over time, determine data gaps, compare historical investigation results with current conditions, and provide lines of evidence for proposed investigations and feasibility studies. Plotting changes in concentrations over time can be very useful to assess pollutant distribution beneath the Site. Central Coast Water Board staff will revise the

[71] The Former SEMCO Twist Drill and Tool Company, Inc. cleanup site on GeoTracker: http://geotracker.waterboards.ca.gov/?gid=SLT3S2411351

requirement, but we continue to strongly recommend that the dischargers tabulate the summary of all historic sampling data as many experienced consultants do to evaluate historical Site conditions and guide future investigations.
Change Made: See revisions to Section F.3.e. of the Proposed Order.

Geosyntec Consultants (on behalf of County of Santa Barbara) – 7

F. REQUIRED ACTIONS
F.4: "The RAP [Remedial Action Plan] must abate the effects of the waste discharges in all media posing a risk to human health and impairing groundwater beneficial uses, and reduce concentrations of wastes in soil, soil gas, and groundwater to background concentrations." – Draft CAO

This requirement is contradictory to others made elsewhere in the document, including *B.11: "Resolution No. 92-49 requires the waste(s) to be cleaned up to background or, if that is not reasonable, to an alternative level that is the most stringent level that is economically and technologically feasible in accordance with California Code of Regulations, title 23, section 2550.4.).* Paragraph B.11 more accurately reflects applicable policy and industry-standard practice not to pre-determine background conditions as a cleanup standard where risk-based cleanup standards may be applicable.

Staff Response to Comment Geosyntec Consultants – 7
State Water Board Resolution No. 92-49 sets forth the policies and procedures to be used during an investigation or cleanup of a polluted site and requires that cleanup levels be consistent with State Water Board Resolution No. 68-16, *Statement of Policy With Respect to Maintaining High Quality of Waters in California* (Resolution No. 68-16). State Water Board Resolution No. 92-49 and No. 68-16 and the Water Quality Control Plan for the Central Coast Region (Basin Plan) establish the cleanup levels to be achieved. Resolution No. 92-49 requires waste to be cleaned up to background, or if that is not reasonable, to an alternative level that is the most stringent level that is economically and technologically feasible in accordance with California Code of Regulations, title 23, section 2550.4. Any alternative cleanup level to background must (1) be consistent with the maximum benefit to the people of the state; (2) not unreasonably affect present and anticipated beneficial use of such water; and (3) not result in water quality less than that prescribed in the Basin Plan and applicable Water Quality Control Plans and Policies of the State Water Board Resolution No. 92-49 requires that where waste in soil discharges or threatens to discharge to waters of the state, the cleanup level for soil must achieve background or an alternative cleanup level that attains the lowest concentration that is economically and technologically feasible, and

that ensures that any remaining waste continuing to discharge to water will not exceed the applicable water quality objectives for the groundwater.[72] State Water Board Resolution No. 88-63 "Sources of Drinking Water" [73] states, "The Regional Boards shall also assure that the beneficial uses of municipal and domestic supply are designated for protection wherever those uses are presently being attained, and assure that any changes in beneficial use designations for waters of the State are consistent with all applicable regulations adopted by the Environmental Protection Agency." See State Water Board WQ Order 92-09, *In the Matter of the Petition of Environmental Health Coalition and Eugene J. Sprofera for Review of Cleanup and Abatement Order No. 85-91, Addendum No. 7* [revising San Diego Regional Board Cleanup and Abatement Order to include appropriate cleanup levels per State Water Board Resolution No. 92-49 and Resolution No. 68-16.].
Change Made: See revisions to Section F.4 of the Proposed Order.

Geosyntec Consultants (on behalf of County of Santa Barbara) – 8

EXHIBIT 4: TIME SCHEDULE
Ex.4 Action 1d: Requirement to submit Completion Report & Restoration Workplan 180 days from issuance of the Order.

This provides 90 days from the submittal of the Well Evaluation Workplan to implement the scope of work and write the completion report. The Draft CAO fails to consider the amount of time it will take for the work plan to be reviewed and approved by CCWRQB. This schedule should be 90 days following the approval of the Well Evaluation Workplan.

Staff Response to Comment Geosyntec Consultants – 8
Central Coast Water Board staff concur with the request to extend the submittal of the Completion Report for the groundwater monitoring well evaluation to 90 days following the approval of the Well Evaluation Workplan.
Change Made: See revisions to Exhibit 4: Action No. 1d of the Proposed Order.

[72] Water quality objectives for groundwater for the Santa Maria River Valley Groundwater Basin, Department of Water Resources Bulletin 118 Basin subbasin No. 3-012.0112, is included in Section B.14 of the Proposed Order.
[73] State Water Board Resolution No. 88-63: https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/1988/rs1988_0063.pdf

Geosyntec Consultants (on behalf of County of Santa Barbara) – 9

EXHIBIT 4: TIME SCHEDULE
Ex.4 Action 3a-3c: Requirement to submit a workplan for on and offsite investigation 180 days from issuance of the Order.

A feasible and technically justified plan for onsite and offsite investigation cannot be completed until the monitoring well network evaluation is complete. This schedule should be 90 days following the submittal of the Groundwater Monitoring Network Completion Report.

Staff Response to Comment Geosyntec Consultants – 9
Central Coast Water Board staff concur with the request to extend the submittal of the Onsite and Offsite Investigation Workplan to 90 days following the approval of the Groundwater Monitoring Network Completion Report.
Change Made: See revisions to Exhibit 4: Action No. 3a-3c of the Proposed Order.

Geosyntec Consultants (on behalf of County of Santa Barbara) – 10

EXHIBIT 4: TIME SCHEDULE
Ex.4 Action 4b: Submit a Remedial Action Plan

A remedial action plan is a complex document which require more than 60 days to complete. This schedule should be 90 days following the approval of the Feasibility Study.

Staff Response to Comment Geosyntec Consultants (on behalf of County of Santa Barbara) – 10
Central Coast Water Board staff concur with the request to extend the submittal of the Remedial Action Plan to 90 days following the approval of the Feasibility Study.
Change Made: See revisions to Exhibit 4: Action No. 4b of the Proposed Order.

Santa Maria Public Airport District – 1

II. LEGAL RESPONSE TO THE DRAFT CAO
A. Delays and the Passage of Time has Impeded the Airport's Ability to Respond to the Draft CAO

Before addressing the Draft CAO, it is important for the record to reflect passage of time and delays that have impacted this issue. The Regional Board should view naming the SMPAD [Santa Maria Public Airport District] as a responsible party through this lens. The Regional Board's long held mission statement includes the following:

“To preserve, enhance, and restore the quality of California’s water resources and Drinking water for the protection of the environment, public health, and all beneficial uses, and to ensure proper water resource allocation and efficient use, for the benefit of present and future generations.”

In order to complete this mission, the Regional Board is entrusted with extensive enforcement powers, including powers codified in the California Water Code. These enforcement mechanisms are intended to be used for a wide variety of activities, including the identification of parties responsible for groundwater contamination. The enforcement statutes are designed to give the Regional Board proper authority to identify responsible parties and then require those parties to implement a cleanup plan in a proper time frame so that the contamination does not spread unnecessarily, and that public health and beneficial uses are protected. Unfortunately, that did not occur in this case. As set forth briefly below, the Regional Board was unable to perform its duties to protect public health. The delays now risks exacerbating discharges into becoming plumes that, over time, become extensive, comingled and regional. Equally important, the delays have denied the alleged responsible parties an order of due process and fundamental fairness. This is because, in part, due to the passage of decades, the alleged responsible parties are now denied the ability to find and present evidence that will insulate them from liability.

The historical facts regarding these impacts are not in dispute. The SEMCO Site, which is defined in the Draft CAO, is not a new issue. In fact, the Regional Board became aware of potential groundwater contamination issues at the SEMCO Site in 1980. Five years later, there was even more evidence of a significant groundwater problem, when the Regional Board learned that one of the City of Santa Maria’s (“City”) drinking water wells had been impacted by releases at the SEMCO Site. Despite having substantial evidence of a potentially significant groundwater contamination problem, the matter was not addressed promptly.

Instead, efforts were focused on going back and forth with the owners of SEMCO. Even though a cleanup and abatement order had been issued to SEMCO, it did not effectively prosecute that case. For example, no subpoenas were issued to SEMCO for information about the company’s finances and insurance policies. It is likely that SEMCO’s standard business insurance policies did not have pollution exclusions, and those policies, which may still exist, would have triggered coverage for the groundwater pollution event. There was also a very limited review of SEMCO’s finances. The record shows reliance on SEMCO’s own statements concerning its ability to pay rather than use of an independent review. A more thorough audit of SEMCO would have provided quicker answers about the company’s ability to handle a protracted and likely expensive groundwater investigation and cleanup. The delays eventually led to SEMCO’s bankruptcy, and ultimately no real responsible party. These are just a few examples of the negative impacts on the parties not being added to the Draft CAO.

Now, literally five decades later, a small public agency – the Airport – which has no

connection to the SEMCO Site groundwater contamination – is expected to participate in funding a cleanup that involves potentially millions in costs. The Airport should be removed from the Draft CAO.

Staff Response to Comment Santa Maria Public Airport District – 1
Central Coast Water Board staff acknowledge that the Site has been contaminated for many years. Some investigations and some remedial actions have been conducted but additional investigation and remedial action is needed to protect water quality and public health. The Proposed Order is the next step in moving forward with the additional investigation and remedial actions. The Santa Maria Airport District is a discharger because it owned the Site and leased it to SEMCO when SEMCO's operations caused a discharge or threatened discharge of waste at the Site.[74,75] See Staff Response to Comment City of Santa Maria – 2, 3, and 6. See Attachment 1.
Change Made: No changes made in response to this comment.

Santa Maria Public Airport District – 2

II. LEGAL RESPONSE TO THE DRAFT CAO
B. The Airport is Not a Discharger

The Regional Board asserts in the Draft CAO that the Airport has liability for the groundwater contamination because it is a "discharger." The Regional Board relies on scant evidence to reach such a conclusion. First, the Regional Board cites to the Airport's ownership of property from 1964 through 1968, a time at which SEMCO allegedly operated on the Airport's property. The Board goes on to state that the Airport is liable as a discharger in this case because the Airport was "aware of the activities that resulted in the discharges of waste and, as lessors of the Site, had the ability to control those discharges." It is notable that the Regional Board staff and counsel provide no evidence to support this conclusory statement.

Rather, to support its claims against the Airport, the Regional Board's Draft CAO relies solely on *United Artists Theatre Circuit, Inc. v. California Regional Water Quality Control Bd.* (2019) 42 Cal.App.5th 851, 887.) (hereafter referred to as *"United Artists"*).

United Artists provides a clear standard for discharger liability under the California Water Code, holding, specifically:

> "[W]e conclude a prior owner may be named in a cleanup order as someone who has 'permitted' a discharge if it knew or should have known that a lessee's activity presented a reasonable possibility of discharge into waters of the state of

[74] Santa Maria Public Airport District letter dated May 23, 1968, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=pv1ew
[75] Purchase agreement dated May 8, 1968, on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=ob0b2

wastes that could create or threaten to create a condition of pollution or nuisance." See, *United Artists* at 864- 865. [Emphasis added.]

The Court further states that "the term 'permitted' is expansive enough to encompass a situation where a landlord let a discharge occur by allowing an activity to take place, where the landlord knew or should have known the general activity created a reasonable possibility of discharge." *United Artists* at 888.

In coming to this conclusion, the Court found that a landowner of property in the 1970s, 1980s and 1990s, should have known that its dry cleaner tenant's dry-cleaning activity created a possibility of discharge. This makes sense, given that the discharges in the *United Artists* case occurred from a highly regulated activity (dry cleaner using solvents) when the California Water Act was in effect.

In stark contrast, here, the alleged discharge occurred from 1964 through 1968, a time when the California Regional Water Quality Control Board did not exist. As discussed in detail in the Roux Report, not only did the Regional Board not exist, there were no environmental statutes or regulations to establish standards, duties practices as to what is expected under law and regulation. This includes standards and practices regarding what a landlord could have known or should have known if its tenant's activities created a possibility of discharge. The facts here must be evaluated based on the standards for landowners in the 1960s, and not the standards used by modern and comprehensive environmental statutes.

As to the facts, as stated above and as stated in the Roux Report, there is no evidence to suggest that the Airport had any information that SEMCO's activities created the possibility of discharge. For example, in 1969, a document provided detail about the City of Santa Maria Community Development Department process for expansion of SEMCO operations. The planning documents from the City of Santa Maria include the following statement (emphasis added):
"The applicant [SEMCO] states that the production does not cause any waste that must be disposed of, nor does it produce any toxic fumes in the air." (See the Roux Report for further details on this document.)

These representations by SEMCO to the City of Santa Maria Development Department in 1969, *after the Airport no longer owned the Property,* indicate that a prior landowner with SEMCO as a tenant, if having any understanding of the operations at the SEMCO Facility at all, would have likely have been told the same thing regarding SEMCO's operations (i.e.g, SEMCO's operations had no waste generation and/or the asserted benign nature of the operations).

The facts in this case are not consistent with the facts in the United Artists case. The Regional Board has improperly cited that case, and without any other evidence or legal standard, the Regional Board must modify the Draft CAO and remove the Airport as a potentially responsible discharger party.

Staff Response to Comment Santa Maria Public Airport District – 2
Central Coast Water Board staff disagree that there were no laws in effect at the time of the District's ownership that established standards, duties, and/or practices as to what is expected under law and regulation with regard to the disposal of waste. See Staff Response to Comment Roux Associates, Inc. – 1 Under the applicable legal standard espoused in *United Artists Theatre Circuit, Inc. v. Cal. Regional Water Quality Control Bd.* (2019) 42 Cal.App.5th 851, the District is properly named as a discharger in the Proposed Order. See Staff Response to Comment Roux Associates, Inc. – 1; Staff Response to Comment City of Santa Maria – 3; Attachment 1 (discussing the general early knowledge of hydrogeology, knowledge that operations using degreasers caused groundwater contamination, and knowledge that TCE was a hazardous chemical and its ubiquitous use as a degreaser).
Change Made: No changes were made to the Proposed Order in response to this comment.

Santa Maria Public Airport District – 3

In sum, the Regional Board's Draft CAO did not demonstrate the necessary knowledge required to assign liability to the Airport. Rather, to the contrary, the Draft CAO was devoid of any facts to connect the Airport to the Groundwater Contamination, nor did it show that the Airport had any knowledge about the potential release of contaminants to the SEMCO Site. The mere passage of time cannot justify forcing innocent and small public agencies like the Airport to assume responsibility for this problem.

Based on the foregoing and the attached Roux Report, we request that the Regional Board remove the Airport from the Draft CAO.

Staff Response to Comment Santa Maria Public Airport District – 3
Central Coast Water Board staff disagree. See Staff Response to Comment City of Santa Maria – 3; Attachment 1 (discussing the general early knowledge of hydrogeology, knowledge that operations using degreasers caused groundwater contamination, and knowledge that TCE was a hazardous chemical and its ubiquitous use as a degreaser).
Change Made: No changes were made to the Proposed Order in response to this comment.

Roux Associates, Inc. (on behalf of Santa Maria Public Airport District) – 1

1) The SMPAD is not a discharger and only owned the Property for approximately four years.

The Draft CAO claims that SMPAD, as a prior land-owner leasing to SEMCO from 1964 to 1968, "knew or should have known that a lessee's activity created a reasonable possibility of discharge into waters of the state of wastes that could create or threaten to create a condition of pollution or nuisance…. Landowners leasing to entities using degreasers (many of which used TCE), know or should have known by the 1940s that there was a reasonable possibility of discharge of wastes that could create, or threaten to create, a condition of pollution or nuisance." This claim is not based on any facts nor is it supported by what was considered standard business practices during the mid-1960s. Rather, a newly formed public Airport district (SMPAD) as a landowner in the 1960s given environmental laws/regulations (none of which substantially existed) at the time would not have had direct or specific knowledge of discharges by a tenant, let alone awareness of the possibility for waste discharges related to degreasing operations. This includes but is not limited to the following supporting facts:

(First bullet listed under Item 1) In 1980, the RWQCB conducted an enforcement inspection of SEMCO. After that investigation, the RWQCB made no note or comment on the degreasing, or solvent storage/disposal operations, which are alleged to have caused the issues that are the subject of the Draft CAO. (Attachment 1.1). If the RWQCB in an enforcement site inspection capacity relating to allegations of illegal discharges did not note the potential for discharges of hundreds of gallons of degreasing solvents specifically at the SEMCO Facility in 1980, it is unreasonable to assert that a landowner in the 1960s would have had knowledge of the possibility of waste discharge and/or creation of pollution, or nuisance at this specific Facility. Later, in 1989 the RWQCB in assessing the SEMCO Property stated, "it is likely waste products were disposed to ground surface **as was commonly done in past times**" (emphasis added). This statement about waste products "commonly" being discharged to the ground indicates that this general issue was commonplace and part of regular historical industrial practices.

(Second bullet under Item 1) In 1969, after SEMCO became owner of the Property, a document detailing a City of Santa Maria Community Development Department process for expansion of SEMCO operations included the following statement (emphasis added), "The applicant states that the production does not cause any waste that must be disposed of, nor does it produce any toxic fumes in the air." (emphasis added; Attachment 1.2). These representations by SEMCO to the City of Santa Maria Community Development Department indicate that SEMCO was informing the City that it "did not cause any waste." There is little doubt that any prior owner who leased the Property to SEMCO would have been told the same thing regarding SEMCO's operations, (i.e. lack of waste generation and/or the asserted benign nature of the operations).

(Third bullet under item 1) Based on a public records act response from the Santa Barbara County Air Pollution Control District (APCD), there were not any air-associated solvent/degreasing permits for the SEMCO Facility. If the key air-quality regulator did not require permits, or was unaware of the scope/details of SEMCO's operation (storage and use of 1000's of gallons of regulated solvent in the 1980s), this is further

support that a landowner in the 1960s would not have been aware of the degreasing, or the RWQCB's wholly unsupported allegation of the SMPAD's "knowledge" of possible discharges claimed in the Draft CAO.

(Fourth bullet under item 1) The well-understood insurance practice of issuing a "pollution exclusion" which generally represents common knowledge of potential industrial polluting activities only came to be as early as the 1970s. This has been acknowledged by the State Water Board in other matters.

(Fifth bullet under item 1) In both 1962 and 1976 versions of the American Society for Testing and Materials standard for vapor degreasing it is stated that, *"If there are no regulations forbidding it, the sludge may be poured on dry ground at a safe distance from buildings and allowed to evaporate. If the sludge is free flowing and can soak into the ground before the solvent evaporates, it may be poured into shallow containers to permit the solvent to evaporate before dumping."*

(Sixth bullet under item 1) In 1964, the American Society of Metals recommended that: "in the absence of any clearly defined ordinances, the sludge [from vapor degreasing] is usually poured on dry ground well away from buildings, and the solvents are allowed to evaporate. If the sludge is free flowing, it is placed in shallow open containers and allowed to evaporate before the solids are dumped on the ground".

(Seventh bullet under item 1) In 1967, the American Insurance Association's Chemical Hazards Bulletin stated that chlorinated hydrocarbon wastes should be, *"moved to a safe location (away from inhabited areas, highways, buildings or combustible structures) and poured onto dry sand, earth or ashes, then cautiously ignited,"* and in other instances the chlorinated hydrocarbon wastes, *"may be placed in an isolated area as before and simply allowed the liquid waste to evaporate"*.

(Eight bullet under item 1) The California Porter Cologne Water Act was enacted in 1970, as was the legal requirement for registration of liquid waste haulers. Irrespective of the failure of the RWQCB to identify the potential for possible solvent discharges in 1980, the first RWQCB water quality control/Basin Plan did not even exist until 1971, pointing to a general lack of understanding at the State and regional level of a need for regional water boards to oversee activities such as potential waste-discharges from degreasing operations like at the SEMCO Facility.

(Ninth bullet under item 1) In 1972, California passed the Hazardous Waste Control Act (Attachment 1.3), where prior to this, "Certain volatile substances are, however, being disposed in open air dumps with insufficient supervision and control to prevent the possibility of creating serious risk of injury or disease to human health and animal life." (Attachment 1.4).

(Tenth bullet under item 1) In 1975 the Santa Barbara APCD passed their first iteration of Rule 321," RE Solvent Cleaning Machines and Solvent Cleaning"

(Eleventh bullet under item 1) The Federal Resource Conservation and Recovery Act (RCRA) was signed into law in 1976 and provided a framework for the management of hazardous and non-hazardous solid wastes. However, it was not until 1980 that the first regulations were promulgated under RCRA.

(Twelfth bullet under item 1) In 1977 the County of Santa Barbara issued a Santa Maria Basin Report which only noted water quality concerns about salts and Nitrates.

Given all of the instances above where the RWQCB itself did not flag degreasing/solvent use during a SEMCO Facility inspection in 1980; where industrial-standards/practices were evolving; and/or either a State, regional or local entity had not specifically identified the SEMCO Facility and/or in general did not have specific laws or regulations even into the 1970s clearly applying to degreasing/solvent waste disposal, it is not expected that the SMPAD as a landowner from 1964 to 1968 would have known about SEMCO's specific operations; or, have had awareness or any knowledge of the possibility of discharges creating a condition of nuisance or pollution.

Staff Response to Comment Roux Associates, Inc. – 1

Central Coast Water Board staff disagree. Water Code section 13304 obligates any person that has "caused or permitted" waste to be discharged where it is, or probably will be, discharged into waters of the state and creates, or threatens to create, a condition of pollution or nuisance, to clean up the waste, abate effects of the waste, or take other necessary remedial action. The key question in assigning responsibility for the cleanup and abatement of waste is whether the discharger caused or permitted the discharge.

During Santa Maria Airport District's ownership period (1964-1968), it had legal control over the property—ultimate responsibility of the condition of land lies with the landowners. Evidence supports the contention that SEMCO's operations during that time did result in discharges. See Staff Response to Comment City of Santa Maria – 3; Attachment 1 (discussing the general early knowledge of hydrogeology, knowledge that operations using degreasers caused groundwater contamination, and knowledge that TCE was a hazardous chemical and its ubiquitous use as a degreaser).

Water Code Section 13304 authorizes the Central Coast Water Board to mandate cleanup by both past and present dischargers. Former dischargers prior to 1981 are liable under Water Code section 13304 if their acts were in violation of existing laws or regulations at the time they were discharging. (Water Code section 13304(j); *In the Matter of the Petition of Alcoa* (State Board Order WQ 93-9).)

The District's acts or failures to act were in violation of at least two laws in effect during its land ownership period. Since 1872, California law has prohibited the creation or continuation of a public nuisance. (See Civ. Code section 3490.) Water pollution can constitute a public nuisance. (See *People v. Truckee Lumber Co.* (1897) 116 Cal. 397, 374). A property owner, such as the District, who fails to abate a continuing nuisance is liable. (See *City of Turlock v. Bristow* (1930) 103 Cal.App. 750,

962.) Additionally, since 1949, California law has prohibited the discharge of waste in any manner which will result in pollution, contamination, or nuisance. (Dickey Water Pollution Act, Cal. Stats. 1949, Ch. 1549, enacted July 28, 1949 (former Water Code section 13000 et seq.); see also Health & Safety Code Sec. 5411.)
Change Made: No changes made in response to this comment.

Roux Associates, Inc. (on behalf of Santa Maria Public Airport District) – 2

2) The DOD should be added as a party to the Draft CAO.

The Draft CAO states that there were two former Army Airfield USTs on the SEMCO Property,18 *"One 1,500-gallon fuel oil UST, identified as T1242, was located beneath the Site in an area that is now a parking lot north of the former Semco building. There are no records indicating UST T1242 was removed or closed in place. As documented in Santa Barbara County's file, there are records that USACE removed one UST at the Site, identified as T1273, on December 17, 1990. UST T1273 was allegedly located on a concrete slab north of a warehouse identified as Building T1273 (Building T1273 is included on the Basic Layout Plan dated 1945). However, UST T1273 is not shown on the 1945 Basic Layout Plan."* The Draft CAO also states,19 *"Additionally, records indicate two USTs17 were located in the northern portion of the Site and were not associated with areas where TCE and VOC use was expected or documented by the USACE (such as the airport hangers motor or sheet metal repair shops, etc.). Also, the locations of the aforementioned former USTs do not correlate with the Site's source area location, where the highest concentrations of TCE and petroleum hydrocarbons have been reported in soil, soil gas, or groundwater."* However, the Draft CAO does not cite to the more than eight feet of petroleum free product identified at the Property (as discussed further in Item 4).

In making these statements in the Draft CAO, the RWQCB is citing that the United States Army Corps of Engineers (USACE) and by extension the DOD were responsible for the USTs on the SEMCO Property. Also, the Draft CAO states that prior to the County and City becoming owners in 1947 the Army Airfield had substantial USTs and hazardous/flammable liquids and the potential to have used trichlorethylene (TCE) and volatile organic compounds (VOCs). Based on USACE/DOD documentation they also concurred in being responsible for the Army Airfield USTs, where the 2014 DOD NDAI document stated, "A Findings and Determination of Eligibility (FDE) signed in 1989 (see Atch 4) found that the Santa Maria Army Airfield qualified as a FUDS. The associated Inventory Project Report (INPR) (see Atch 5) written in the early 1990s recommended the creation of an containerized hazardous, toxic and radioactive waste (Con/HTRW) project to remove old underground storage tanks. In 1994, a revision to the INPR was submitted and in June 1995 both a Con/HTRW and an HTRW project were authorized."20

Although the location of the SEMCO Facility may not be where TCE and VOC use in the

RWQCB's opinion, *"was expected or documented by the USACE;"* the RWQCB overlooks that very little to no VOC analysis was conducted by the USACE associated with the UST abandonment/investigation/remediation effort, let alone evaluating past pipelines into and within buildings from the tanks. In at least one instance when VOCs were analyzed for during the USACE UST effort, VOCs were detected (Tank 1317 [Lube Oil Pump House], where Tank 1317 was located approximately 1,200 feet south of the SEMCO Facility, immediately adjacent to the Mafi Trench Site [See Attachment 2.1) Tank 1317 was not located in an area where "hangers, motor or sheet metal repair shops" existed and samples collected on behalf of the USACE detected halogenated compounds in sludge at 1,100 parts per million (ppm); and PCE in liquid at 0.06 ppm (57.9 parts per billion). A Mr. Frank DeMargo (sic) from the RWQCB was reportedly consulted by the USACE regarding the detections. Despite all of this evidence, and known discharges of contaminants associated with former Army operations at the Army Airfield, the RWQCB absolved the DOD of any responsibility specific to SEMCO in 2014.

Beyond the known detection of VOCs associated with former Army Airfield operations, the specific operations in World War II at this Army Airfield are very likely to have used chlorinated solvents.

(First bullet under item 2) The Army Airfield was home to both a critical training function for P-38 propellor powered airplane fighter pilots, and also was one of four bases in California for the secret P-59 jet fighter airplanes during and after World War II (See inset below, with full 1945 Santa Maria Times article in Attachment 2.2 and 412th Fighter Group jet images in Attachment 2.3).

(Second bullet under item 2) In fact, leading up to the closure of the Santa Maria Army Airfield, the 412th Fighter Group it housed was growing with addition of key additional squadrons up to and into 1945 within the 412th Fighter Group, as noted here:

"412 FG was established at Muroc AAF on 30 November 1943 as the USAAF's - in fact, America's - premier jet airplane equipped fighter unit. As part of the 4th Air Force, the 412 FG formed three squadrons: the 29th Fighter Squadron (FS) - "Gamecocks"; 31st FS - "Foxes"; and the 445th FS. Respectively, these three squadrons would go on to operate P-59As and P-59Bs. …

It was during the late 1944-to-late 1945 time period that several additional squadrons were attached to the 412 FG. These were comprised of the 361st FS, 615th Air Engineering Squadron (AES), and the 624th Air Material Squadron (AMS). Another lesser-known P-59 unit - the 440th Army Air force Base Unit, a training squadron - was in operation at Santa Maria by late June 1945."

(Third bullet under item 2)1945 documentation from the US Army Air Corps/Air Force clearly indicates TCE solvent use in maintenance degreasing operations.

Given this, the Army Airfield would have been prioritized to be performing the highest level of aircraft maintenance (likely including chlorinated solvents for degreasing).34 The 2014 DOD NDAI35 declaration notably makes no mention of the jet-fighter function of the Army Airfield and does not explicitly note the two tanks on the SEMCO Facility.

Based upon all of the above, if past owners of the Property are considered dischargers by the RWQCB, the DOD/US Army former Airfield operations should not be overlooked, in that the Army Airfield both used chlorinated solvents and likely discharged them and was both an owner and operator at the SEMCO Property (in addition to potential petroleum/heating fuel comingling discussed below). The dismissal by the RWQCB of any Army Airfield UST/and or operational area for chlorinated solvent use/discharge, without further evaluation is not merited.

Staff Response to Comment Roux Associates, Inc. – 2
See Staff Response to Comment County of Santa Barbara – 2
Change Made: No changes made in response to this comment.

Roux Associates, Inc. (on behalf of Santa Maria Public Airport District) – 3
3) The Draft CAO oversimplifies the historical SEMCO data, and does not include some key applicable facts.

(First bullet under item 3) As noted above in Comment 2, the Draft CAO does not adequately consider past solvent use, operations and liability for USTs related to the DOD and past Army Airfield operations and presence of hydrocarbon free product.

(Second bullet under item 3) Draft CAO Item A17 references, *"increasing trends in groundwater waste concentrations"* to suggest that soil contamination is continuing to impact groundwater.: and Draft CAO Item A14 references shallow and deep groundwater results from three separate investigation phases over 45 years (1987 to 2022), each approximately 20 years apart with varying concentrations, sampling methods (developed wells vs possible grab samples), and depths ranging from 5 feet to 50 feet below ground surface (bgs). For example, the Draft CAO reports TCE in shallow groundwater at 430,000 micrograms per liter (ug/L) from 1987 to 1991, 300 ug/L in 2003, and 350,000 ug/L in 2021/2022. Although there may be substantial variability in the groundwater data, given the sporadic nature of the past investigations and data availability an "increasing trend" may or may not be observed.

(Third bullet under item 3) Draft CAO Item A18 states, *“Groundwater has historically flowed south to southeast in the shallow zone and south to southwest in the deep zone.”* In the 1991 ERCE Report documenting installation of the deeper “*DMW*” monitoring wells, uncertainty was expressed about the deeper groundwater flow direction, which at the time was indicated as being towards the north. A 2004 report by Everest Services Inc. prepared for Concha Investment for the SEMCO Facility indicates that deep monitoring well DMW-1 was abandoned and that all wells were re-surveyed, and the resurvey resulted in a change in reported top of casing elevations for wells DMW-2

through DMW-4 of between 2.24 and 2.29 feet relative to earlier elevations. The 2021 most recent groundwater report for the SEMCO Facility indicates that well DMW-3 could not be located and also that a previously undocumented well "DMW-5?" may exist.

(Fourth bullet under item 3) In 2003, the RWQCB sent a letter to Chris Mathys of ORO Financial (owner of the SEMCO Property at the time), and indicated that, "We were also reviewing the nearby Mafi-Trench site file and found that it was difficult to see any correlation between the groundwater potentiometric surface at the two nearby sites."

(Fifth bullet under item 3) Given the sporadic nature of the deeper groundwater level information, the substantial change in reference point elevations and the uncertainty over how many deep monitoring wells have existed/do exist at the SEMCO Facility, it is speculative as to what the applicable deeper groundwater flow directions have been.

Staff Response to Comment Roux Associates, Inc. – 3
Regarding the First bullet, see Staff Response to Comment Chris Mathys, Rhine LP – 1; Staff Response to Comment County of Santa Barbara – 2 through 6. Regarding the Second bullet, the comment is noted. Central Coast Water Board staff are aware of the data gaps in SEMCO's historical investigations; the Proposed Order provides a summary of the data that is available in the record and highlights the necessity for additional information as outlined in the Proposed Order. Regarding the Third, Fourth, and Fifth bullets, see Staff Response to Comment County of Santa Barbara – 3.
Change Made: No changes were made to the Proposed Order in response to this comment.

Roux Associates, Inc. (on behalf of Santa Maria Public Airport District) – 4

4) Although the SEMCO Facility is a source of impacts to the subsurface, there is a potential comingling of different constituents; and, given the uncertain groundwater flow directions, the potential co-mingling of impacts from multiple sources.

(First bullet under item 4) In 1990, the RWQCB documented the discovery by SEMCO's consultant of approximately 8.5 feet of free product on the water table at the SEMCO Facility. Although at the time, the petroleum hydrocarbon fluids were attributed to being cutting oil intermixed with VOCs, there is no definitive documentation whether the petroleum hydrocarbons might have been from cutting oils, or other oil (possibly related to former DOD/Army Airfield operations). The consultant for SEMCO in 1989 noted, *"A vertical chemical variation within this free product plume appeared to be present during sampling. The portion of the free product located just above the water table in both wells appeared less viscous than the overlying portions of the free product found in SMW2, perhaps suggesting a difference in composition over the length of the*

free product column. In addition, the basal portion of the free product appeared to contain halocarbons."

(Second bullet under item 4) There is a clear factual change in SEMCO Facility operations where in numerous documents a transition from TCE to 1,1,1-TCA used for degreasing is noted in the 1980s. The presence of 1,4-dioxane associated with 1,1,1-TCA may present an important date/time indicator as to timing of discharges/masses released. The presence of 1,4-dioxane generally indicates some contribution/co-mingling with more recent solvent use/discharges/releases.

(Third bullet under item 4) Consultants for the Mafi Trench Site have asserted that the SEMCO Facility is the source of TCE detected in the on-Mafi Trench deep monitoring well; however, the Mafi Trench Site is due south of the SEMCO Facility, where as noted above, there is uncertainty on the deeper groundwater flow directions, indicating an incomplete understanding, or comingled contributions to the deeper groundwater bearing zone:

> In a recent RWQCB summary of the Mafi Trench site online it is quoted that, *"The groundwater flow direction within the perched groundwater zone is toward the west to southwest. During the operation of the remediation system the groundwater flow direction was reported to flow toward the northwest at times."* and *"The regional aquifer groundwater flow direction is toward the west northwest. Historical water well records indicate that groundwater within the regional aquifer fluctuates between approximate depths of 90 feet to 220 feet. Discontinuous zones of perched groundwater are known to exist within the Basin."*
>
> In a report prepared by a consultant for the Mafi Trench entity; in spite of their estimated shallow and regional groundwater flows being to west/southwest, northwest, or west-northwest, "Padre concluded that the trichloroethene (TCE)-impacted groundwater within the regional aquifer beneath the Project Site is likely associated with the former SEMCO facility located 255 feet northeast of the Project Site (Padre, 2019). Therefore, continued monitoring of well DW-1 (deep, regional aquifer well) is not proposed as part of the Updated MRP.
>
> In a report by a consultant for Mafi Trench in 1991, boring B8, located east of the Mafi Trench site building detected 1,1,1-Trichloroethane (1,1,1-TCA), 1,1-dichloroethane (1,1-DCA) and Toluene, indicating impacts in a wide-spread area. The Mafi Trench Site also detected tetrachloroethylene (PCE) in groundwater.

Staff Response to Comment Roux Associates, Inc. – 4
See Staff Response to Comment Chris Mathys, Rhine LP – 1; Staff Response to Comment County of Santa Barbara – 2 through 6. As stated in the Proposed Order, SEMCO used VOCs, specifically TCE, cutting oil (petroleum hydrocarbons), and 1,4-dioxane in its operations. The highest

concentrations of these contaminants are below areas where SEMCO used storage containers to store these chemicals at the Site. Soil, soil gas, and groundwater impacts in this area of the Site indicate that the subsurface contamination originated in the area where SEMCO stored its chemicals.[76] Additional investigation and assessment of data gaps for offsite and comingled sources is needed to provide the lines of evidence required to name any of the offsite sources mentioned by the commenter.

Regarding the First bullet, see Staff Response to City of Santa Maria – 3.

Regarding the Second bullet, see Staff Response to Comment Geosyntec Consultants –2.

Regarding the Third bullet, see Staff Response to Comment County of Santa Barbara – 3. Until the dischargers investigate groundwater further by delineating the pollutants in groundwater, there is no data or lines of evidence on the hydraulic connectivity between the SEMCO Site and Mafi Trench.

Change Made: No changes were made to the Proposed Order in response to this comment.

Roux Associates, Inc. (on behalf of Santa Maria Public Airport District) – 5

5) As indicated in the two timelines below, the DOD and SEMCO both were owners and operators of the SEMCO Property and the challenges faced by the RWQCB in driving any meaningful remediation/investigation has resulted in current day greater costs and scope than if effective investigation/remediation had been realized in the 1980s/1990s.

OWNERSHIP:
<1942: Approximately 3,100 acres of land is acquired for the Army Airfield. Prior to the development of the airfield in 1942 the land was undeveloped and covered with brush and eucalyptus trees.

1942–1946: The Army Airfield was commissioned in 1942.

1946: The Army Airfield was placed on surplus property list.

1947: the County of Santa Barbara acquired the property by means of an interim permit issued by the War Assets Administration.

February 1949: The Army Airfield was quitclaim deeded to the County of Santa Barbara and the City of Santa Maria, each with a one-half interest. Use of the former Army Airfield was restricted by deed to public airport purposes with a recapture clause, which was later removed.

[76] Exhibit 1, Figures 3,5,6, and 7 of the Proposed Order on GeoTracker: https://geotracker.waterboards.ca.gov/?surl=zjuf5

1949-1964: The Santa Maria Public Airport was managed jointly by the City of Santa Maria and County of Santa Barbara.

1964: The City of Santa Maria and the County of Santa Barbara formed a district for the joint management of the former Army Airfield. The former Army Airfield was transferred to SMPAD in March 1964.

1947>1968, the SEMCO Property was leased to SEMCO for operations.

May 1968: the SEMCO Property was sold by SMPAD to the Staffords. The Staffords owned the Property until 2001.

2001: The Staffords defaulted on their loan.

August 2002: Ownership of the SEMCO Property was transferred to Oro Financial of California, Inc. as a partial payment of debts.

December 2002: Ownership of the SEMCO Property was transferred to Concha Investments, Inc.

June 2006: Ownership of the Property was transferred to Chris Mathys.

May 2009: Ownership of the Property was transferred to Platino, LLC.

August 2010: Ownership of the Property was transferred to Rhine L.P.

Post 1980-Environmental Timeline

1980, threat of impacts to the subsurface from SEMCO operations identified by the RWQCB, with no mention of degreasing or potential VOC discharges/impacts (Attachment 1.1).

1985, RWQCB first involvement with SEMCO associated with solvents/VOCs.

1987, first RWQCB CAO.

1988, RWQCB concerns are expressed as, “contamination found at the Semco site is not minor” … “[t]hese high concentrations pose a significant threat to water quality”.

1989, second RWQCB CAO, with subsequent letter by the RWQCB stating, “Continued delays in cleanup will only allow the organic contaminant plumes to spread, and the cost of cleanup to increase.”

1993, a staff report for a RWQCB Board meeting stated, *“It is apparent from*

review of the files there has been a great deal of "foot dragging" and denial of responsibility by SEMCO. Apparently, SEMCO is still denying its responsibility in spite of the overwhelming evidence they are the source.

Basically, six years have been spent assessing the extent of contamination at this site. It has been eight years since the problem was first discovered. The shallow ground water zone dewatering system was constructed and operated for one month, June 1992.

The treatment system's carbon canister fouled (with what, is unknown at this time) and the system was shut down." …

"Semco missed a unique opportunity (toward the end of a drought) to dewater the shallow perched ground water zone and remove the solvents and cutting oil. The winter rains have likely increased the amount of water in the shallow zone to be removed and caused more vertical migration of solvents and lateral spreading of cutting oil (leading to more expense for Semco to assess and remediate)".

In 1994, the California Department of Toxic Substances Control (DTSC) issued an Imminent and Substantial Endangerment Determination.

In 2010, a RWQCB review of the SEMCO file the RWQCB stated, *"The SEMCO case has been active for 20-25 years, yet site soil, shallow groundwater and deeper supply aquifer groundwater remain significantly impacted primarily by hundreds ppb (and higher) solvents and TPH (and most recently, free product), the full spatial extent of pollution is unknown, the pollution appears to be worsening in some respects, Board orders are not being complied with, and there has been no environmental progress, or activity, on the case since 2003."* and *"Therefore, pursuant to existing Board orders, this case must be advanced to complete plume definition and remediation. Before commencing additional plume definition and remediation, all existing monitoring devices should be monitored and sampled to indicate current conditions."*

In 2014, a subsequent RWQCB review stated, *"The SEMCO case has been active for 20-25 years, yet site soil, shallow groundwater and deeper supply aquifer groundwater remain significantly impacted primarily by hundreds ppb (and higher) solvents and TPH (and most recently, free product), the full spatial extent of pollution is unknown, the pollution appears to be worsening in some respects, Board orders are not being complied with, and there has been no environmental progress, or activity, on the case since 2003."*

Staff Response to Comment Roux Associates, Inc. – 5
The information provided by the commenter confirms that the Central Coast Water Board appropriately included the District in the Proposed Order. Consistent with State

Water Board Resolution No. 92-49, Central Coast Water Board has made a reasonable effort to identify all dischargers associated with the discharge.

We acknowledge that the Water Code does not provide equitable remedies or restitution for persons' or entities' past harm, and often dischargers must seek those remedies in civil litigation. The Proposed Order does not preclude the dischargers, including the Airport, from pursuing contribution from one another or third parties using other legal avenues.

See Staff Response to Comment Chris Mathys, Rhine LP – 1 and 2

See Staff Response to Comment County of Santa Barbara – 2

Regarding the “OWNERSHIP” timeline, the Central Coast Water Board does not have evidence indicating that SEMCO began operations and leasing property in 1947.

The Staffords (as individuals) owned the SEMCO property (at that time, APN 111-291-008) from 1968, when they purchased it from the airport, to 1975, when they transferred the property to the Henry A. Stafford and Rhea Stafford Revocable Trust (Trust). The Trust owned the SEMCO property from 1975 to 2001. During the Trust’s ownership, the Trust split the property into two parcels, APNs 111-291-027 and 111-291-028.

The commenter states that ownership of the “property” was transferred to Rhine L.P. in 2010. However, the property was split into nine parcels during the time Chris Mathys owned the two parcels mentioned above. The SEMCO Site now comprises six of the nine parcels as explained in the Proposed Order. What the commenter fails to include in their summary is that Chris Mathys sold all nine parcels to Platino, LLC in 2009, and in 2010, one parcel was transferred to Rhine L.P. and eight parcels were transferred to Curry Parkway LP. In 2019, one parcel was transferred to Fernando Salas (an individual) and in 2021, one parcel was transferred to Mark J Powers, Inc. Therefore, the current Site ownership, as summarized in the Proposed Order, includes Rhine L.P. (one parcel), Curry Parkway LP (three parcels), Fernando Salas (one parcel), and Mark J Powers, Inc. (one parcel) (See Proposed Order, Table 1 of Exhibit One).

Regarding the “Post 1980 – Environmental Timeline,” Central Coast Water Board staff do not understand what the commenter’s objective is with their timeline. The timeline is inadequate and oversimplified relative to the timeline in the record. The commenter fails to summarize the “environmental timeline” from 2015 to the Site’s current status, and has left out significant environmental investigations between 1987 - 2003, and 2021 – 2022, as well as remedial activities implemented between 1994-2001. The Proposed Order summarizes Site activities in more detail and provides context for the information included in the commenter’s timeline.

Change Made: No changes were made to the Proposed Order in response to this comment.

Roux Associates, Inc. (on behalf of Santa Maria Public Airport District) – 6

6) As a summary of the timelines, in terms of the ownership of and operations at the former SEMCO Property and the SMPAD:

As noted throughout this letter, the SMPAD is not a discharger.

Semco was an operator from 1947>>2001 (for 54 years), and owner/operator from 1968>2001 (33 years)

The DOD was an operator and owner from ~1942>1947 (Owner & Operator [~5 years]), and accepted responsibility for their old tanks in the 1980s/1990s, including VOC wastes.

The City/County owned and/or controlled the Property from 1947>1964 (17 years)

Other entities owned and/or operated between 2001>2023 (22 years)

Staff Response to Comment Roux Associates, Inc. – 6
See Staff Response to Comment Chris Mathys, Rhine LP – 1 and 2 See Staff Response to Comment City of Santa Maria – 6
Change Made: No changes were made to the Proposed Order in response to this comment.

Fernando Salas – 1

Mr. Salas became an owner of the Property as of May 2019.

He never caused or permitted waste to be discharged on the Property.

He disagrees that he should investigate, monitor or clean up waste and/or abate the discharges of wastes because he did not discharge waste on the Property.

He never used volatile organic compounds, trichloroethene, petroleum hydrocarbons or 1,4- dioxane on the Property.

During his ownership he has used the Property as a storage yard for trucks.
He should not be held accountable for discharges that may have been committed by previous owners.

He cannot submit to pay for monitoring or reporting programs where he was not responsible for the discharge.

It seems that any discharge on the Property occurred prior to 2019 and therefore Mr. Salas is not responsible for the discharge that occurred. Mr. Salas objects to the enforcement order.

Staff Response to Comment Fernando Salas – 1
Water Code section 13304 obligates any person that has "caused or permitted" waste to be discharged where it is, or probably will be, discharged into waters of the state and creates, or threatens to create, a condition of pollution or nuisance, to clean up the waste, abate effects of the waste, or take other necessary remedial action. The key question in assigning responsibility for the cleanup and abatement of waste is whether the discharger caused or permitted the discharge of waste to waters of the state. Current landowners, such as Fernando Salas, are responsible for cleanup, regardless of whether the landowner owned the property at the time of the initial release. (*Tesoro Refining & Marketing Co. v. Los Angeles Regional Water Quality Control Board*, 42 Cal. App. 5th 453, 472 (2019); *In the Matter of the Petition of Schmidl* (State Board Order WQ 89-1); *In the Matter of the Petition of Zoecon Corp.* (State Water Board Order No. WQ 86-02); *In the Matter of the Petition of Vallco Park, Ltd*.(State Water Board Order No. WQ 86-18). We acknowledge that the Water Code does not provide equitable remedies or restitution for persons' or entities' past harm, and often dischargers must seek those remedies in civil litigation. The Proposed Order does not preclude the dischargers, including Mr. Salas, from pursuing contribution from one another or third parties using other legal avenues.
Change Made: No changes were made to the Proposed Order in response to this comment.

Enclosures: *Evaluation of United Artists Theatre Circuit, Inc. v. California Regional Water Quality Control Bd. (2019) 42 Cal.App.5th 851* (Attachment 1)

Attachment 1 to COMMENTS AND ENFORCEMENT STAFF RESPONSES
Cleanup and Abatement Order No. R3-2023-0070

Evaluation of *United Artists Theatre Circuit, Inc. v. California Regional Water Quality Control Bd.* (2019) 42 Cal.App.5th 851

I. Introduction

Under California law, in determining liability pursuant to Water Code section 13304, the following test applies to former landowners who leased to operators that caused discharges:

> We construe "permitted" in [Water Code] section 13304 to mean that a prior owner may be named in a cleanup order if it knew or should have known that a lessee's activity created a reasonable possibility of discharge into waters of the state of wastes that could create or threaten to create a condition of pollution or nuisance.

(*United Artists Theatre Circuit, Inc. v. California Regional Water Quality Control Bd*. (2019) 42 Cal.App.5th 851, 887 (hereafter *United Artists*.)

The following supports Central Coast Water Board staff's position that landowners, particularly public entity landowners in Southern California, leasing to industrial entities using degreasers and/or metal fabrication (most of which used TCE), knew or should have known by the 1940s that there was a reasonable possibility of discharge of wastes that could create or threaten to create a condition of pollution or nuisance.

II. General Early Knowledge Regarding Basic Hydrogeology

Professor Craig E. Colten specializes in the progression of knowledge of developments in groundwater hydrology and documented early knowledge of the connection between industrial practices and groundwater contamination. In his 1991 article, *A Historical Perspective on Industrial Wastes and Groundwater Contamination*, he describes nineteenth century literature, in both Europe and the United States, demonstrating the known scientific processes connecting surface water contamination and groundwater contamination, including concepts of pressure, flow and medium, permeability and transmissivity. (Craig E. Colten, *A Historical Perspective on Industrial Wastes and Groundwater Contamination* (April 1991) Geographical Review, vol. 81, no. 2, at pp. 216-218 (hereafter *Historical Perspectives*).) In short, the concept that pollutants discharged on the surface could migrate to groundwater was appreciated decades or even centuries before operations at the site.

Professor Colten's book, *The Road to Love Canal – Managing Industrial Waste before EPA* similarly establishes that "analyses of public waters in the early 1950s yielded an increasing understanding of the potential toxicity of minute quantities of toxic substances." (Colten & Skinner, The Road to Love Canal – Managing Industrial Waste

before EPA (1996) p. 44 (hereafter Road to Love Canal).) "The overwhelming evidence demonstrates that there was an adequate recognition of the endangerment potential of land disposal of chemical wastes." (*Id.* at p. 45.) In another article, Professor Colten establishes that "public policy addressed groundwater at the level of common law, statutory law, and agency regulation by the first decade of the century." (Craig E. Colten, *Groundwater and the Law: Records v. Recollections* (Spring 1998) The Public Historian vol. 20, no. 2, at p. 34 (hereafter *Groundwater and the Law*.)

> The earliest groundwater contaminant recognized by scientists was human sewage (for a historical perspective, see Mallman and Mack, 1961). In 1854, a London doctor linked a cholera epidemic to contamination of drinking water supplies—including a neighborhood water well—with sewage. In Switzerland in 1872, a typhoid epidemic was traced to sewage contamination in a river that recharged a town's groundwater supply. In 1909, two German researchers ran a series of controlled tests to investigate bacterial migration underground and established that bacteria could travel with groundwater from one well to another. As chemical use increased after World War II, isolated reports of chemical contamination of groundwater appeared. In 1947, for example, hexavalent chromium from electroplating wastes was discovered in a Michigan groundwater supply after homeowners complained that their water had turned yellow (Deutsch, 1961). Relatively common after the war were complaints of foaming groundwater—from contamination with the surfactant alkyl benzene sulfonate that had leaked from septic systems. Recognizing the increasing potential for chemical contamination of groundwater, the American Water Works Association created a task force of scientists, the Task Group on Underground Waste Disposal and Control, to study the problem in the early 1950s.

(National Academies Press, Alternative for Groundwater Cleanup (1994), pp. 23-24.)

Since the 1920s, manufacturers have faced increasing restrictions on the release of liquid wastes into watercourses and have thus turned to ponds and pits known as surface impoundments for disposal of effluents. These sites allow for evaporation or percolation of their contents. (Craig E. Colten, *Historical Perspectives, supra,* at p. 215.)

The need for controlling waste discharges was acknowledged almost one hundred years ago:

> Both [government and industry] promoted and sought solutions to waste disposal problems from an early date. Manufacturers moved slowly to adopt existing technology to minimize recognized liabilities, while outwardly proclaiming the problem was under control. Before 1930, a deliberate course of action was understandable given existing volumes of hazardous wastes and manufacturers' ability to find isolated sites and

> thereby avoid creating a public nuisance. Between 1930 and 1948, industry took a clearly articulated position, but failed to provide waste treatment in accord with its pronouncements and its ability.

(Craig E. Colten, *Creating a Toxic Landscape: Chemical Waste Disposal Policy and Practice, 1900-1960* (Spring 1994) Environmental History Review, vol. 18, no. 1, at p. 86 (hereafter *Creating a Toxic Landscape*).) A review of the scientific literature on the motion of subsurface fluids, and sanitary engineering indicates that by 1940, knowledge was sufficient to argue against surface discharges of harmful fluids. (*Ibid.*)

In response to groundwater pollution incidents, in the 1940s, California officials discussed the need for legislation pertaining directly to groundwater, recognizing the importance of groundwater for domestic supplies and "the fact that Californians 'lived on the roof of our reservoir.'" (Craig E. Colten, *Groundwater and the Law, supra*, at p. 35.)

A 1942 article in the Sewage Works Journal recognized the connection of industries to tainted public water supplies, "impart[ing] to them chemical constituents, difficult if not impossible to remove by known and practical methods of water treatment." (Milton Adams, et al., *Industrial Wastes, the Law and Pollution Control Programs* (May 1942) Sewage Works Journal, vol. 14, no. 3, pp. 653-665.)

"By the late 1940s, hydrologists, geochemists, public health officials, and industrial waste management experts all were familiar with harmful consequences of toxic effluents." (Craig E. Colten, *Creating a Toxic Landscape, supra*, at p. 104.)

Beginning in the 1950s, California established a landfill classification system that restricted the disposal of hazardous materials to prevent groundwater pollution. (Craig E. Colten, *Groundwater and the Law*, *supra*, at pp. 28-29 ["Frank C. Foley, memo to Illinois State Geological Survey Groundwater Division Files, June 10, 1952, Champaign, Illinois. California had conducted studies of landfill leachate in the early 1950s and had instituted its classification system by the mid-1950s. American Public Works Association, Municipal"].)

By the 1950s, trade organizations including the American Petroleum Institute, National Safety Council and Manufacturing Chemists' Associated "had offered warnings that land disposal of hazardous chemicals could cause off-site damages, thus informing manufacturers that there were well-known liabilities associated with such practices." (Craig E Colten, *Road to Love Canal, supra*, p. 103.)

By the 1950s most states had pollution statutes that applied to surface water and groundwater on the books, and industry was well aware of the legal liabilities for polluting behavior." (Craig E. Colten, *Road to Love Canal, supra*, at p. 164.)

In 1953, "both water consumers and waste disposers recognized that chemical wastes could travel with the general groundwater flow without significant dilution or degradation." (Craig E. Colten, *Road to Love Canal, supra*, at p. 58 [citing Task Group

E4-C, *Findings and Recommendations of Underground Waste Disposal* (December 1953) Journal (American Water Works Association), vol. 45, no. 12, pp. 1295-1297 (hereafter *Findings and Recommendations*].)

"[D]uring the 1940's, 1950's and 1960's, segments of the scientific and technical communities … were cognizant of toxic properties of industrial waste, reached a consensus about the link between the degradation of groundwater and land-based hazardous waste disposal, and issued strong advisories about threats to soil and groundwater." (Halina Szejnwald Brown et al., *Reassessing the History of U.S. Hazardous Waste Disposal Policy – Problem Definition, Expert Knowledge and Agenda-Setting* (June 1992) RISK: Health Safety & Environment (1990-2002), vol. 8, no. 3, p. 250; see also *id.* at pp. 252-259 [The Body of Knowledge about Industrial Waste Disposal].)

The risk of groundwater contamination was well known in the 1960s and 1970s, receiving widespread public recognition in the popular press as a result of Rachel Carson's 1962 work *Silent Spring* and incidents like the Love Canal case, in which President Carter declared an emergency in Niagara Falls, New York, relating to risks to human health linked to groundwater contamination.

Some would argue, based upon the passage of significant environmental legislation in the 1970s, that the impacts of industrial chemical use was unknown prior to that timeframe. Professor Craig E. Colten debunks this notion in his article *Groundwater and the Law*:

> Far from being newly discovered in the 1970s, groundwater pollution and the need to protect groundwater were well-established concerns in the public health, sanitary engineering, and industrial communities. Several developments during the 1940s and 1960s fostered additional attention to this topic … Numerous groundwater pollution incidents during the 1940s and 1950s directed public agency attention to finding and abating the contaminant sources.

(Craig E. Colten, *Groundwater and the Law, supra,* at p. 31.)

Knowledge of the fact that sewers leak and the need to separate wastewater systems from water supplies dates back centuries, if not thousands of years. (See, e.g., Roger D. Hansen, *Water-related Infrastructure in Medieval London*, at http://www.waterhistory.org/histories/london/.) Similarly, the links between discharges of chemicals and groundwater contamination were well-known.

III. Knowledge that Operations Using Degreasers Caused Groundwater Contamination

A 1948 article, written by consultant Metcalf and Eddy Engineers, identified trichloroethylene as a part of the plating process, noting that prior to going to the plating departments, the metal parts are treated by degreasers using trichloroethylene. (Almon L. Fales, *A Plating Waste Disposal Problem* (Sept. 1948) Sewage Works Journal, vol. 20, no. 5 at p. 857.) The plating process wastes "would be unsuitable to discharge into the sanitary sewers … and would be objectionable to discharge either [surface waters] without prior treatment." (*Id*. at pp. 858-859.)

In *Findings and Recommendations,* the authors recognized the link between groundwater pollution and industrial waste disposal in industries involving cleaning fluids, finding that groundwater pollution had been observed "nationwide in distribution" and "[i]mportant areas of such pollution are found in the Far West." (Task Group E4-C, *Findings and Recommendations,* supra, at p. 1295.) The authors conclude that protection of groundwaters from pollution "is a matter of legitimate public interest because the waters may be expected to move, naturally or under artificial influence, to other properties, public or private; because their direction of movement is not readily ascertainable or constant; and because, once polluted, they may remain so, to the detriment of other users and even future generations." (Task Group E4-C, *Findings and Recommendations,* supra, at p. 1297.)

Also in 1961, the Federal Housing Administration commissioned a study regarding the status of knowledge of groundwater contaminants. The Federal Housing Administration's foreword observed:

> In recent years groundwater contamination has become more significant because the potable water supplies in many areas have approached or exceeded the safe yield; the population density and increased industrial wastes creates a heavier burden on our groundwater resources; and the increased construction or residential projects which are beyond the mains of municipal water supplies and, therefore, are dependent upon groundwater. FHA believes the information contained in the Status of Knowledge of Ground Water Contaminants will have far reaching results and will materially aid all those involved in the development of methods to ensure the safety of groundwater against contamination.

(W. E. Stanley & R. Eliassen, Massachusetts Instit. of Tech., *Status of Knowledge of Groundwater Contaminants* published by the Federal Housing Administration (1960), Foreword, p. ii.) The authors later state, "The objective of this investigation has been to search out literature bearing on various groundwater contaminants; assemble and evaluate available information; and to determine the present state of knowledge relative to each contaminant. Particular attention has been paid to … possibilities of forecasting contamination of groundwater at specific locations…." (*Id.* at p. vi.) The authors identify the need for control of various known groundwater contaminants, including metal finishing wastes. (*Id.* at p. x.) Stanley and Eliassen's work contained hundreds of references and documented hundreds of cases of groundwater contamination. Specific

to metal finishing, the article identifies sources of groundwater contaminants due to the placement of wastes on the surface, which seep into porous soil. While the article cites the need for more data to evaluate the physio-chemical relationships of chemicals in the waste, the relationship to groundwater pollution was clear: "There is evidence that chemicals of these waste waters may travel considerable distances through water bearing strata and also may remain in aquifers for long periods of time." (*Id.* at p. 37.) There is a cross reference to Lyne and McLachlan, *Contamination of Water by Trichloroethylene*, Analyst 74, p. 513 (1949) Abs – Chem. Abs. 776h - 1950, at p. 462 discussing water contamination by trichloroethylene, observing that "wells near factories often are rendered unfit for drinking."

IV. Knowledge that TCE was a Hazardous Chemical and its Ubiquitous Use as a Degreaser

Use of TCE as a degreaser, particularly during the 1940's and 1950's is well-documented. According to government estimates, 220 million pounds of TCE was projected to be used in the United States in 1944, 92% of which was used in metals degreasing operations, mainly for defense contractor use. (Steve Swisdak, A Historical Survey of the Use and Regulation of Trichloroethylene (Oct. 11, 2013) presentation to American Bar Association 21st Fall Conference, p. 11.) Use of TCE was pervasive in the Los Angeles area. The 1967 edition of the Los Angeles County Air Pollution Control District Air Pollution Engineering Manual noted that TCE accounted for an estimated 90% of all vapor degreasing solvent used in Los Angeles County. (*Id*. at p. 16.) During this timeframe, it was already known that TCE was a hazardous chemical.

In 1943, the authors of *Degreasers Cause Death* documented the dangers - including "mysterious deaths" - associated with the use of chlorinated hydrocarbons, including TCE, which were "widely used as degreasers of tools and machinery." (*Degreasers Cause Death* (Sept. 25, 1943) The Science News-Letter, vol. 44, no. 13, p. 198.)

"In 1943 the [Maximum Allowable Concentration] for TCE was 200 ppm … [S]afety advisories called for special labeling and handling procedures that included ventilation systems and safety clothing." (Craig E. Colten, *Road to Love Canal*, *supra,* at p. 19.)

In response to "acute cases of systemic poisoning, with one fatality," the authors of a Public Health Report in 1946 compiled "useful information on the composition and relative toxicity of many of the trade name solvent products" used in cleaning, degreasing and thinning paints. The intent of this article was to compile the analyses "into a solvent index which contained all the pertinent data in a form which would permit their convenient use by the personnel of the plant, medical, safety, and engineering department. Since many of the products are used by other industries, it was deemed advisable to make the information available generally to everyone interested in industrial hygiene." The authors of this article included a senior sanitary engineer and senior surgeon of the United States Public Health Service. (Brandt, *Composition of*

Some Trade Name Solvents Used for Cleaning and Degreasing, and for Thinning Paints (Feb. 1, 1946) Public Health Reports (1896-1970), vol. 61, no. 5, pp. 132-143.)

"In 1949 investigators used similar methods to detect trichloroethylene in well water at estimated levels of 18 ppm. This discovery alerted public health officials to the solvent's persistence in groundwater and led them to warn that even at low levels, measured by existing analytical methods, it could be toxic." (Craig E. Colten, *Road to Love Canal, supra*, at p. 115.)

American Water Works similarly reported health hazards associated with the use of TCE in degreasing in 1950. (Cary and Valaer, *Occupational Health Hazards* (May 1950) Journal American Water Works Association, vol. 42, no. 5, pp. 485-489.)

Richard E. Doherty documented the wide use of TCE and subsequent regulation. (Richard E. Doherty, *A History of the Production and Use of Carbon Tetrachloride, Tetrachloroethylene, Trichloroethylene and 1,1,1 -Trichloroethane in the United States: Part 2- Trichloroethylene and 1,1,1- Trichloroethane* (2000) Journal of Environmental Forensics, p. 83.) Of note, he states as follows:

- "Trichloroethylene … was a widely used degreasing solvent that achieved public notoriety for its role in contaminating drinking water wells in Woburn, Massachusetts in the 1960s." (*Ibid.*)
- "In a recurrence of the cattle poisonings of the early 1920s, hemorrhagic diseases in cattle in the early 1950s were traced to animal feed containing TCE-extracted soybean meal. This finding caused most United States manufacturers to voluntarily withdraw soybean oil meals defatted with TCE in 1952." (*Id.* at p. 86 [citing Chem. Week., 1953; Huff, 1971].)
- "For TCE, the era of environmental regulation began early. In November 1965, the Los Angeles County Air Pollution Control District (APCD) proposed Rule 66, a regulation to limit solvent emissions from industrial facilities… The resulting modified rule was enacted into law without dissent in August 1966." (*Id.* at p. 86 [citing C &EN, 1966b, 1966e, 1966d].)
- "TCE's use as a degreaser decreased in the 1960s due to toxicity concerns." (*Id.* at p. 83.)
- "The 1970 Clean Air Act (CAA) controlled TCE as a VOC due to its suspected contribution to ozone and smog formation." (*Id.* at p. 87.)

The Occupational Safety and Health Administration (OSHA) established a permissible exposure limit (PEL) for TCE in 1971. (See Env. Protection Agency Proposed Rule, 82 Fed. Reg. 7432, 7437 (Jan.19, 2017.)

Other chlorinated solvents used in metal plating operations, including PCE, were also known to pose hazards to human health. In 1965 the Legislature set a specific

maximum level for PCE vapor in former Health and Safety Code section 13399.5, above which would be considered a "dangerous toxic concentration." (Stats. 1965, ch. 1781, section 13, p. 3974.)

V. California-Specific Documentation of the Known Connection Between Industrial Operations and Polluted Drinking Water

Evidence supporting adoption of the Dickey Water Pollution Act in 1949, adoption of the Porter-Cologne Water Quality Control Act (Porter-Cologne Act) in 1969, and the general environmental movement of the 1960s, leading to the adoption of the federal Clean Water Act in 1972 documents the known risks of industrial operations, including degreasing operations, and the potential for such operations to cause groundwater contamination. (See State Water Resources Control Board (State Water Board), *How We Came to Be: A Short History Lesson* (hereafter *History Lesson*), at https://www.waterboards.ca.gov/board_reference/docs/about_the_waterboards.pdf (*History Lesson*); see U.S. Environmental Protection Agency, *Damages and Threats Caused by Hazardous Materials Sites*, at https://nepis.epa.gov/Exe/ZyPDF.cgi/91012IHL.PDF?Dockey=91012IHL.PDF.) Although the Porter-Cologne Act was "recognized as one of the nation's strongest pieces of pollution legislation," nuisance had already been illegal in California since 1872. (*History Lesson*.)

> Since 1872, California law has prohibited the creation of a public nuisance. In 1925, water pollution was held by the courts to be a public nuisance. And since 1949, California law has expressly prohibited any discharge of waste in a manner which results in pollution, contamination, or nuisance. Additionally, the Porter–Cologne Water Quality Act of 1969 defined nuisance and authorized Regional Water Boards to order cleanup.

In the Matter of the Petition of Lindsay Olive Growers (Nov. 18, 1993) State Water Board Order WQ 93-17.)

In addition to statewide recognition of risks to groundwater, the local authorities similarly responded with local ordinances: "By the mid-1940s both the city and county of Los Angeles had enacted restrictions on the disposal of potentially harmful industrial effluent to areas that served to recharge aquifers used for public water supplies (Craig E. Colten, *Historical Perspectives, supra*, at pp. 220 [citing Pickett, *Disposal of industrial wastes in Los Angeles County* (1948) Water and Sewage Works, no. 95, pp. 33-36 and Schneider, *Industrial waste disposal in Los Angeles city* (1948) Water and Sewage Works, pp. 37-39.]). Several years later the Los Angeles County Board of Engineers specified the need to exclude toxic wastes from recharge waters." (*Id.* at 2020.)

The American Water Works Association's July 1947 Annual Meeting was held in conjunction with the annual meeting of the Federal Sewage Works Association, bringing together, in San Francisco, the largest ever gathering of sanitary, water, sewage and

industrial waste experts, with an attendance of almost 2,000 professionals. (https://awwa.onlinelibrary.wiley.com/doi/epdf/10.1002/j.1551-8833.1947.tb18642.x.) At this conference, Byron Doll, Deputy City Engineer of Huntington Park, California, noted in his presentation the widely-publicized connection between discharges of chemicals from industrial operations and contamination of drinking water sources:

> "An article in the Los Angeles Times of Mar. 8, 1947, reports that the Attorney General of California filed an injunction suit against a chemical manufacturing plant discharging 280,000 gpd of poisonous industrial waste liquid. The liquid seeped into under ground water sources adjacent to Vernon, Calif., and endangered the drinking water of residents of Southeast Los Angeles, Maywood, South Gate, Huntington Park and adjacent Los Angeles County."

(Byron E. Doll, *Formulating Legislation to Protect Ground Water from Pollution* (Oct. 1947) Journal American Water Works Association, vol. 39, no. 10, at p. 1003.) The article further documents the knowledge of "pollution of water by industrial wastes, a problem which exists throughout the state." (*Ibid*.) "In southern California both surface and ground water supplies have been polluted. As ground water basins are the prime source of supply in southern California, this problem is most grave in this area." (*Id.* at 1003-1004.) "Industrial waste disposal and its relationship to ground water resources acutely affect the future development and growth of vie southern California counties: Los Angeles, Orange, Riverside, San Bernardino and Ventura. (*Id.* at p. 1004.) The article further notes that "the industrial development in Los Angeles County, which contributes to its water supply problems, is much more intensive than in any of the other affected counties." (*Ibid.*) The role and impact of groundwater was highlighted: "Even the rivers are upside down, and although they have large flows, most of them are unseen and flow through the porous gravels lying below the surface of the ground. Because these gravels are so porous, industrial wastes which enter them may pollute large quantities of water before detection. Contamination may become serious before it is noted, due to the slow rate of travel of the ground water through the underground gravels." (*Id.* at 1005.) The article notes the connection between industry (specifically identifying the metal plating industry as a culprit) and pollution, noting that industrial operations discharged into sewers, sumps, stream channels or onto the ground. (*Id.* at pp. 1003-1006.) Numerous incidents of groundwater contamination in the Los Angeles area were reported, including: Montebello (in 1945, wells impacted within 17 days of discharge, ultimately impacting 11 wells serving 25,000 people); 125 locations along the Los Angeles River Channel where industrial wastes were being discharged; Long Beach-Signal Hill-Compton (wastes from oil recovery and refinery processes); Vernon-Huntington Park (battery manufacturing plant discharges caused abandonment of wells in 1917); Griffith Park (chromium from aircraft plant discharges). (*Id.* at pp. 1006-1007.) The article concludes by noting that the California State Assembly had appointed nine members to study the problem of the pollution of the state's waters, specifically

identifying “the problem of water pollution resulting from disposal of industrial wastes.” (*Id.* at p. 1008.)

Also in 1947, an article by then Deputy County Engineer of Los Angeles County, acknowledged the “serious water pollution problems” caused by improper disposal of sewage and industrial wastes in Southern California, “and particularly in the metropolitan area of Los Angeles County.” (Pickett, *Protection of Underground Water from Sewage and Industrial Wastes* (May 1947) Sewage Works Journal, vol. 19, no. 3, pp. 464-472.) The article notes that in “numerous cases,” industries put down cesspools or leaching pits to get rid of wastes. (*Id.* at p. 469.) “Many serious cases of pollution have resulted, especially from industries having chemical wastes….” (*Ibid.*) The article describes one particular case, the “Montebello Incident,” where a plant with “relatively small” amounts of waste, “consisting only of water used to wash down the walls and floors of the plant, and to clean out the containers in which the weed killer was prepared,” caused such significant contamination that 11 wells in the area were taken out of operation within 17 days after the plant began operations. (*Ibid*.) The article notes that such cases of pollution had caused industrial plants to change their operations to prevent similar catastrophes. “Experience in the handling of many such cases has demonstrated the need to establish certain simple policies and procedures essential to the protection of water supplies, prevention of nuisance, and menace to the public health and safety.” (*Id.* at 470.) In an effort to address the threat of chemical contamination in groundwater supplies, “amendments to a county ordinance were drafted for regulating waste disposal from industrial plants. These amendments have recently been adopted by the Board of Supervisors for control of industries in the unincorporated areas of the county.” (*Ibid*.) Preparation of the ordinance involved “representatives of industry, property owners, and the Los Angeles Chamber of Commerce.” (*Ibid*.)

At the 1953 California Section Meeting of the American Water Works Association, research engineers and an assistant professor of engineering, all from University of California, Berkeley, presented their paper regarding underground movement of bacterial and chemical pollutants. (R.G. Butler, et al., *Underground Movement of Biological and Chemical Pollutants* (1954) J. Am. Water Works Assn., vol. 46, no. 97, pp. 97-111 (hereafter *Underground Movement of Biological and Chemical Pollutants*). The paper recognized the importance of “underground travel of pollutants,” noting that “[t]he danger that public water supplies may become polluted as a result of the movement of bacteria and chemicals underground has long been a matter of concern to public health authorities … California’s law, for example, prohibits the discharge of any waters unfit for human consumption into underground water-bearing formations….” (*Id.* at pp. 97-98.)

Three years prior to the time of this article in 1954, the California Department of Health, the State Water Board and the University of California had begun investigating the conditions leading to “pollution travel;” the need to pretreat wastes to avoid causing

pollution of groundwater supplies through, among other causes, spreading of waste on the surface and "leachings from refuse dumps, privies, septic tanks, cesspools, sewer wells, and polluted surface waters." (*Id.* at p. 98-99.) The article documented chemical contamination in Vernon, California, that traveled 3-5 miles. (*Id.* at p. 108, citing Blakely, L.E., *The Rehabilitation, Cleaning, and Sterilization of Water Wells* (Jan. 1945) Journal American Water Works Association, vol. 37, no. 101.) Among the key conclusions was the fact that chemical pollutants travel farther and faster than bacterial pollutants in the groundwater (from 2 to 30 times as far). (Butler, *Underground Movement of Biological and Chemical Pollutants, supra*, at pp. 106, 110.)

VI. Conclusion

The dangers of improper waste disposal have been documented for more than a century. Industry and government, both at the state and local level in California, have known about the risk of waste flows from surface discharges to groundwater since at least the 1940's. TCE use in and around southern California was pervasive in the mid-1900's. By at least the late 1940s, knowledge that TCE was commonly used as a degreaser in metal fabricating operations and that TCE was a hazardous chemical had disseminated widely. Landowners, particularly public entity landowners in Southern California, leasing to industrial entities using degreasers and/or metal fabrication, knew or should have known by the 1940s that their lessee's activity created a reasonable possibility of discharge into waters of the state of wastes that could create or threaten to create a condition of pollution or nuisance. Such landowners, therefore, "permitted" a discharge of waste and may be named in a cleanup and abatement order pursuant to Water Code section 13304.